

# Correlations to the Massachusetts Standards for Digital Literacy and Computer Science

Grades K–5



**KEYBOARDING Without Tears®**  
by Learning Without Tears

**Keyboarding Without Tears** is an effective, game-based curriculum for students in grades K–5 that fits perfectly into the developmental progression of writing. It teaches pre-keyboarding and keyboarding skills, computer readiness, digital citizenship, and digital literacy.

The **Keyboarding Without Tears** teaching method is developmentally appropriate by grade. Keyboarding for the kindergarten student is quite different from keyboarding for a second or fifth grader. What is consistent across the grades is our simplified approach to letter location and learning to use fingers correctly. We use a specific teaching order to teach letters on the keyboard.

We know that to be successful today, schools must effectively integrate different skills and technologies. In order for students to be successful writers, they must have a range of tools available to produce effective, written communication with ease.

Your students will be learning technology foundation skills and touch typing skills that they need to successfully navigate computer-based testing and produce written work in the classroom and on computer-based, high-stakes testing.

**Keyboarding Without Tears** lessons and activities make learning keyboarding a positive experience for students in just 5–10 minutes a day or 45 minutes per week with 36 weeks of instruction.

**Keyboarding Without Tears** will help your students solidify strong technology and typing skills and muscle memory. We use rich and varied activities to teach keyboarding skills along with capitalization and punctuation practice, word and sentence practice, and common keyboarding and computer functions. Lessons include multisensory elements and can be easily connected to other subjects.

Digital citizenship lessons are taught developmentally. At this young age, many students are not yet experienced with all the opportunities and risks of the online world. **Keyboarding Without Tears** educates students about technology and gives them exposure to the things they will experience. According to Ribble (2011), digital citizenship consists of nine elements: access, commerce, communication, literacy, etiquette, law, rights and responsibilities, health and wellness, and security.

Visit [LWTears.com/kwt](http://LWTears.com/kwt) for more information.

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## Kindergarten–Grade 2: Computing and Society [CAS]

<b>Safety and Security [K-2.CAS.a]</b>	
<p>1. Demonstrate proper ergonomics (e.g., body position, stretching) when using devices.</p>	<p><b>Teacher’s Guides:</b>  <i>Kindergarten Keyboarding Teacher’s Guide</i>, p. 31</p> <p><i>1<sup>st</sup> Grade Keyboarding Teacher’s Guide</i>, p. 33</p> <p><i>2<sup>nd</sup> Grade Keyboarding Teacher’s Guide</i>, p. 33</p>
<p>2. Use electrical devices safely and in moderation (e.g., unplug devices by pulling the plug rather than the cord, do not mix water/food and electric devices, avoid gaming and walking).</p> <p>3. Care for devices appropriately (e.g., handling devices gently, completely shutting down devices when not in use, storing devices in the appropriate container).</p>	<p><b>Teacher’s Guides:</b>  <i>Kindergarten Keyboarding Teacher’s Guide</i>, pp. 18, 28–29</p> <p><i>1<sup>st</sup> Grade Keyboarding Teacher’s Guide</i>, pp. 20, 30–31</p> <p><i>2<sup>nd</sup> Grade Keyboarding Teacher’s Guide</i>, pp. 20, 30–31</p> <p><b>Student Resources:</b>  <i>Keys for Me</i> (Grade K)            Digital Citizenship Assessment (animation with call and response quiz)</p> <p><i>My Keying Board</i> (Grade 1)            Digital Citizenship Assessment (animation with call and response quiz)</p> <p><i>Key Power</i> (Grade 2)            Digital Citizenship Assessment (five question, student-facing quiz)</p>
<p>4. Explain that a password helps protect the privacy of information.</p> <p>5. Identify safe and unsafe examples of online communications.</p> <p>6. Explain why we keep personal information (e.g., name, location, phone number, home address) private.</p> <p>7. Identify which personal information (e.g., username or real name, school name or home address) should and should not be shared online and with whom.</p>	<p><b>Teacher’s Guides:</b>  <i>Kindergarten Keyboarding Teacher’s Guide</i>, pp. 18, 20, 21, 22</p> <p><i>1<sup>st</sup> Grade Keyboarding Teacher’s Guide</i>, pp. 20, 22, 23, 24</p> <p><i>2<sup>nd</sup> Grade Keyboarding Teacher’s Guide</i>, pp. 20–24</p> <p><b>Student Resources:</b>  <i>Keys for Me</i> (Grade K)            Digital Citizenship Assessment (animation with call and response quiz)</p> <p><i>My Keying Board</i> (Grade 1)            Digital Citizenship Assessment (animation with call and response quiz)</p> <p><i>Key Power</i> (Grade 2)            Digital Citizenship Assessment (five question, student-facing quiz)</p>

<p>8. Explain why it is necessary to report inappropriate electronic content or contact.</p>	<p><b>Teacher's Guides:</b>  <i>Kindergarten Keyboarding Teacher's Guide</i>,  p. 21</p> <p><i>1<sup>st</sup> Grade Keyboarding Teacher's Guide</i>,  p. 23</p> <p><i>2<sup>nd</sup> Grade Keyboarding Teacher's Guide</i>,  p. 23</p>
<p><b>Ethics and Laws [K-2.CAS.b]</b></p>	
<p>1. Define good digital citizenship as using technology safely, responsibly, and ethically.</p> <p>2. Demonstrate responsible use of computers, peripheral devices, and resources as outlined in school rules [Acceptable Use Policy (AUP) for K–2].</p>	<p><b>Teacher's Guides:</b>  <i>Kindergarten Keyboarding Teacher's Guide</i>,  pp. 19, 23</p> <p><i>1<sup>st</sup> Grade Keyboarding Teacher's Guide</i>,  pp. 20, 26</p> <p><i>2<sup>nd</sup> Grade Keyboarding Teacher's Guide</i>,  pp. 20, 27</p> <p><b>Student Resources:</b>  <i>Keys for Me</i> (Grade K)  Digital Citizenship Assessment (animation with call and response quiz)</p> <p><i>My Keying Board</i> (Grade 1)  Digital Citizenship Assessment (animation with call and response quiz)</p> <p><i>Key Power</i> (Grade 2)  Digital Citizenship Assessment (five question, student-facing quiz)</p>
<p>3. Explain that most digital artifacts have owners.</p> <p>4. Explain the importance of giving credit to media creators/owners when using their work.</p>	<p>N/A</p>
<p><b>Interpersonal and Societal Impact [K-2.CAS.c]</b></p>	
<p>5. Identify and describe how people (e.g., students, parents, police officers) use many types of technologies in their daily work and personal lives.</p>	<p><b>Teacher's Guides:</b>  <i>Kindergarten Keyboarding Teacher's Guide</i>,  pp. 28–30</p> <p><i>1<sup>st</sup> Grade Keyboarding Teacher's Guide</i>,  pp. 30–32</p> <p><i>2<sup>nd</sup> Grade Keyboarding Teacher's Guide</i>,  pp. 30–32</p>

6. Recognize when the purpose of content is to provide information or to influence you to act.

**Teacher's Guides:**

*Kindergarten Keyboarding Teacher's Guide,*  
pp. 19, 21–22

*1<sup>st</sup> Grade Keyboarding Teacher's Guide,*  
pp. 21, 23–24

*2<sup>nd</sup> Grade Keyboarding Teacher's Guide,*  
pp. 21, 22, 24

## Kindergarten–Grade 2: Digital Tools and Collaboration [DTC]

Digital Tools [K-2.DTC.a]	Keyboarding Without Tears [KWT]
<p>1. Operate a variety of digital tools (e.g., open/close, find, save/print, navigate, use input/output devices).</p>	<p>Activities throughout require students to explore and navigate different digital tools, such as using navigation arrows, drag and drop, selecting multiple choice answers, and sending a document to print.</p> <p><b>Student Resources:</b>  <i>Keys for Me</i> (Grade K)            For Example:            Enrichment Activity, My Choice Keyboarding            Letters with Wood Pieces (e.g., Week 1, Activity 2)            Puzzle Pieces (e.g., Week 7, Activity 69)</p> <p><i>My Keying Board</i> (Grade 1)            For Example:            Enrichment Activity, My Choice Keyboarding            Puzzle Surprise (e.g., Week 7, Activity 86)            Mat Man Match (e.g., Week 7, Activity 77)</p> <p><i>Key Power</i> (Grade 2)            For Example:            Enrichment Activity, My Choice Keyboarding            Digital Citizenship Assessment (five question, student-facing quiz)            Find the Letter (e.g., Week 33, Activity 532)            Dump the Combo (e.g., Week 11, Activity 136)            Shift for Capitals (e.g., Week 33, Activity 535)</p>
<p>2. Identify, locate, and use letters, numbers, and special keys on a keyboard (e.g., space bar, shift, delete).</p>	<p><b>Student Resources:</b>  <i>Keys for Me</i> (Grade K)            Throughout, For Example:            Enrichment Activities, My Choice Keyboarding, Hear It, Type It, and Teacher Custom Creation            Build A Keyboard (e.g., Week 12, Activity 122)            Painted Finger Clue (model, e.g., Week 18, Activity 210)            Target Practice (model, e.g., Week 18, Activity 213)</p> <p><i>My Keying Board</i> (Grade 1)            Throughout, For Example:            Enrichment Activities, My Choice Keyboarding, Hear It, Type It, and Teacher Custom Creation            Build A Keyboard (e.g., Week 9, Activity 104)            Bouncing Vowels (e.g., Week 15, Activity 196)            Math Sentences (e.g., Week 35, Activity 526)</p> <p><i>Key Power</i> (Grade 2)            Throughout, For Example:            Enrichment Activities, My Choice Keyboarding, Hear It, Type It, and Teacher Custom Creation            Tab, You're It (e.g., Week 33, Activity 539)            Shifty Targets (e.g., Week 33, Activity 531)            Find the Letter (e.g., Week 33, Activity 532)</p>

<p>3. Create a simple digital artifact.</p>	<p><b>Student Resources:</b>  <i>Keys for Me</i> (Grade K)          Enrichment Activity, My Choice Keyboarding</p> <p><i>My Keying Board</i> (Grade 1)          Enrichment Activity, My Choice Keyboarding</p> <p><i>Key Power</i> (Grade 2)          Enrichment Activity, My Choice Keyboarding</p>
<p>4. Use appropriate digital tools individually and collaboratively to create, review, and revise simple artifacts that include text, images, and audio.</p>	<p>Throughout the Keyboarding Without Tears curriculum, students individually create and review a variety of digital artifacts. At this time, there is not a feature to complete these tasks collaboratively.</p> <p><b>Student Resources:</b>  <i>Keys for Me</i> (Grade K)          Enrichment Activity, My Choice Keyboarding, Hear It, Type It</p> <p><i>My Keying Board</i> (Grade 1)          Enrichment Activity, My Choice Keyboarding, Hear It, Type It</p> <p><i>Key Power</i> (Grade 2)          Enrichment Activity, My Choice Keyboarding, Hear It, Type It</p>
<p><b>Collaboration and Communication [K-2.DTC.b]</b></p>	
<p>1. Collaboratively use digital tools and media resources to communicate key ideas and details in a way that informs, persuades, and/or entertains.</p> <p>2. Use a variety of digital tools to exchange information and feedback with teachers.</p>	<p><b>Teacher's Guides:</b>  <i>Kindergarten Keyboarding Teacher's Guide</i>, pp. 19, 21–22</p> <p><i>1<sup>st</sup> Grade Keyboarding Teacher's Guide</i>, pp. 21, 23–24</p> <p><i>2<sup>nd</sup> Grade Keyboarding Teacher's Guide</i>, pp. 21, 22, 24</p> <p><b>Student Resources:</b>  <i>Keys for Me</i> (Grade K)          Enrichment Activity, My Choice Keyboarding</p> <p><i>My Keying Board</i> (Grade 1)          Enrichment Activity, My Choice Keyboarding</p> <p><i>Key Power</i> (Grade 2)          Enrichment Activity, My Choice Keyboarding</p>
<p>3. Use a variety of digital tools to present information to others.</p>	<p>N/A</p>



<b>Research [K-2.DTC.c]</b>	
1. Conduct basic keyword searches to gather information from teacher-provided digital sources (e.g., online library catalog, databases).	N/A
2. Create an artifact individually and collaboratively that answers a research question while clearly expressing thoughts and ideas.	<p>In the My Choice Keyboarding activity, students type independent responses to prompts within the activity, expressing their thoughts and opinions. It is scaffolded for each grade level and increases in difficulty as students work through the curriculum. Once each activity is completed, the student can print (publish) their work. This activity is completed individually.</p> <p><b><u>Student Resources:</u></b>  <i>Keys for Me</i> (Grade K)            Enrichment Activity, My Choice Keyboarding</p> <p><i>My Keying Board</i> (Grade 1)            Enrichment Activity, My Choice Keyboarding</p> <p><i>Key Power</i> (Grade 2)            Enrichment Activity, My Choice Keyboarding</p>
3. Acknowledge and name sources of information or media (e.g., title of book, author of book, website).	N/A

## Kindergarten–Grade 2: Computing Systems [CS]

<b>Computing Devices [K-2.CS.a]</b>	
<ol style="list-style-type: none"> <li>1. Identify different kinds of computing devices in the classroom and other places (e.g., laptops, tablets, smartphones, desktops).</li> <li>2. Identify visible components of computing devices (e.g., keyboard, screen, monitor, printer, pointing device).</li> <li>3. Explain that computing devices function when applications, programs, or commands are executed.</li> <li>4. Operate a variety of computing systems (e.g., turn on, use input/output devices such as a mouse, keyboard, or touch screen; find, navigate, launch a program).</li> </ol>	<p><b>Teacher’s Guides:</b>  <i>Kindergarten Keyboarding Teacher’s Guide</i>,            pp. 28–30</p> <p><i>1<sup>st</sup> Grade Keyboarding Teacher’s Guide</i>,            pp. 30–32</p> <p><i>2<sup>nd</sup> Grade Keyboarding Teacher’s Guide</i>,            pp. 30–32</p>
<b>Human and Computer Partnerships [K-2.CS.b]</b>	
<ol style="list-style-type: none"> <li>1. Explain that computing devices are machines that are not alive but can be used to help humans with tasks.</li> <li>2. Recognize that some tasks are best completed by humans and others by computing devices (e.g., a human might be able to rescue someone in a normal environment, but robots would be better to use in a dangerous environment).</li> </ol>	N/A
<ol style="list-style-type: none"> <li>3. Recognize that different tools can solve the same problem (e.g., pen and paper, calculators, and smartphones can all be used to solve simple mathematical problems).</li> </ol>	<p><b>Teacher’s Guides:</b>  <i>Kindergarten Keyboarding Teacher’s Guide</i>,            p. 44</p> <p><i>1<sup>st</sup> Grade Keyboarding Teacher’s Guide</i>,            p. 47</p> <p><i>2<sup>nd</sup> Grade Keyboarding Teacher’s Guide</i>,            p. 45</p>
<b>Networks [K-2.CS.c]</b>	
<ol style="list-style-type: none"> <li>1. Explain that networks link computers and devices locally and around the world allowing people to access and communicate information.</li> </ol>	<p><b>Teacher’s Guides:</b>  <i>Kindergarten Keyboarding Teacher’s Guide</i>,            pp. 22, 23</p> <p><i>1<sup>st</sup> Grade Keyboarding Teacher’s Guide</i>,            pp. 24–26</p> <p><i>2<sup>nd</sup> Grade Keyboarding Teacher’s Guide</i>,            pp. 24–27</p>

## Kindergarten–Grade 2: Computational Thinking [CT]

<b>Abstraction [K-2.CT.a]</b>	
<ol style="list-style-type: none"> <li>List the attributes of a common object, for example, cars have a color, type (e.g., pickup, van, sedan), number of seats, etc.</li> </ol>	<p><b>Student Resources:</b>  <i>Keys for Me</i> (Grade K)            Mat Man Match (e.g., Week 5, Activity 45)            Pick Me (e.g., Week 27, Activity 349)</p> <p><i>My Keying Board</i> (Grade 1)            Mat Man Match (e.g., Week 6, Activity 664)            Pick Me (e.g., Week 28, Activity 378)</p> <p><i>Key Power</i> (Grade 2)            Mat Man Match (e.g., Week 1, Activity 4)            Pick Me (e.g., Week 15, 206)</p>
<b>Algorithms [K-2.CT.b]</b>	
<ol style="list-style-type: none"> <li>Define an algorithm as a sequence of defined steps.</li> <li>Create a simple algorithm, individually and collaboratively, without using computers to complete a task (e.g., making a sandwich, getting ready for school, checking a book out of the library).</li> <li>Enact an algorithm using tangible materials (e.g., manipulatives, your body) or present the algorithm in a visual medium (e.g., storyboard).</li> </ol>	N/A
<b>Data [K-2.CT.c]</b>	
<ol style="list-style-type: none"> <li>Identify different kinds of information (e.g., text, charts, graphs, numbers, pictures, audio, video, collections of objects.)</li> </ol>	<p><b>Student Resources:</b>  <i>Keys for Me</i> (Grade K)            Throughout, For Example:            Enrichment Activity, Hear It, Type It            Math Master (e.g., Week 35, Activity 466)            Label Maker (e.g., Week 35, Activity 468)            Mat Man Match (e.g., Week 5, Activity 45)            Pick Me (e.g., Week 27, Activity 349)</p> <p><i>My Keying Board</i> (Grade 1)            Throughout, For Example:            Enrichment Activity, Hear It, Type It            Math Master (e.g., Week 27, Activity 365)            Label Maker (e.g., Week 26, Activity 341)            Mat Man Match (e.g., Week 6, Activity 664)            Pick Me (e.g., Week 28, Activity 378)</p> <p><i>Key Power</i> (Grade 2)            Throughout, For Example:            Enrichment Activity, Hear It, Type It            Math Sentences (e.g., Week 18, Activity 258)            Mat Man Match (e.g., Week 1, Activity 4)            Math Master (e.g., Week 18, Activity 255)            Pick Me (e.g., Week 15, 206)</p>

<p>2. Identify, research, and collect information on a topic, issue, problem, or question using age-appropriate digital technologies.</p>	<p>N/A</p>
<p>3. Individually and collaboratively propose a solution to a problem or question based on an analysis of information.</p>	<p><b><u>Student Resources:</u></b>  <i>Keys for Me</i> (Grade K)          Enrichment Activity, My Choice Keyboarding   <i>My Keying Board</i> (Grade 1)          Enrichment Activity, My Choice Keyboarding   <i>Key Power</i> (Grade 2)          Enrichment Activity, My Choice Keyboarding</p>
<p>4. Individually and collaboratively create information visualizations (e.g., charts, infographics).</p>	<p>N/A</p>
<p>5. Explain that computers can save information as data that can be stored, searched, retrieved, and deleted.</p>	<p><b><u>Teacher's Guides:</u></b>  <i>Kindergarten Keyboarding Teacher's Guide</i>,          pp. 22   <i>1<sup>st</sup> Grade Keyboarding Teacher's Guide</i>,          pp. 24   <i>2<sup>nd</sup> Grade Keyboarding Teacher's Guide</i>,          pp. 24</p>
<p><b>Programming and Development [K-2.CT.d]</b></p>	
<p>1. Define a computer program as a set of commands created by people to do something.          2. Explain that computers only follow the program's instructions.          3. Individually or collaboratively create a simple program using visual instructions or tools that do not require a textual programming language (e.g., "unplugged" programming activities, a block-based programming language).</p>	<p>N/A</p>
<p><b>Modeling and Simulation [K-2.CT.e]</b></p>	
<p>1. Describe how models represent a real-life system (e.g., globe, map, solar system, digital elevation model, weather map).          2. Define simulation and identify the concepts illustrated by a simple simulation (e.g., growth and health, butterfly life cycle).</p>	<p>N/A</p>

## Grades 3–5: Computing and Society [CAS]

Safety and Security [3-5.CAS.a]	
<p>1. Describe how to use proper ergonomics (e.g., body position, lighting, positioning of equipment, taking breaks) when using devices.</p>	<p><b>Teacher’s Guides:</b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher’s Guide</i>            p. 41</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher’s Guide</i>            p. 39</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher’s Guide</i>            p. 39</p>
<p>2. Describe the threats to safe and efficient use of devices (e.g., SPAM, spyware, phishing, viruses) associated with various forms of technology use (e.g., downloading and executing software programs, following hyperlinks, opening files).</p>	<p><b>Teacher’s Guides:</b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher’s Guide</i>            pp. 22–25, 28, 30</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher’s Guide</i>            pp. 22–25, 27</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher’s Guide</i>            pp. 22–25, 27</p> <p><b>Student Resources:</b>  <i>Keyboarding</i> (Grade 3)            Digital Citizenship Assessment</p> <p><i>Keyboarding Success</i> (Grade 4)            Digital Citizenship Assessment</p> <p><i>Can-Do Keyboarding</i> (Grade 5)            Digital Citizenship Assessment</p>

<p>3. Identify appropriate and inappropriate uses of technology when posting to social media, sending email or texts, and browsing the internet.</p>	<p><b>Teacher's Guides:</b>  <i>3rd Grade Keyboarding Teacher's Guide</i>  p. 22, 23, 27, 28, 29</p> <p><i>4th Grade Keyboarding Teacher's Guide</i>  pp. 22, 23, 27, 28, 33</p> <p><i>5th Grade Keyboarding Teacher's Guide</i>  pp. 22, 23, 27, 28, 33</p> <p><b>Student Resources:</b>  <i>Keyboarding</i> (Grade 3)  Digital Citizenship Assessment</p> <p><i>Keyboarding Success</i> (Grade 4)  Digital Citizenship Assessment</p> <p><i>Can-Do Keyboarding</i> (Grade 5)  Digital Citizenship Assessment</p>
<p>4. Explain the proper use and operation of security technologies (e.g., passwords, virus protection software, spam filters, popup blockers, cookies).</p> <p>5. Describe ways to employ safe practices and avoid the potential risks/dangers associated with various forms of online communications, downloads, linking, internet purchases, advertisements, and inappropriate content within constrained environments.</p>	<p><b>Teacher's Guides:</b>  <i>3rd Grade Keyboarding Teacher's Guide</i>  pp. 22, 23, 26, 27, 28, 29, 35</p> <p><i>4th Grade Keyboarding Teacher's Guide</i>  pp. 22, 23, 27, 28, 33, 34</p> <p><i>5th Grade Keyboarding Teacher's Guide</i>  pp. 22, 23, 27, 28, 33, 34</p> <p><b>Student Resources:</b>  <i>Keyboarding</i> (Grade 3)  Digital Citizenship Assessment</p> <p><i>Keyboarding Success</i> (Grade 4)  Digital Citizenship Assessment</p> <p><i>Can-Do Keyboarding</i> (Grade 5)  Digital Citizenship Assessment</p>

<p>6. Identify different types of cyberbullying (e.g., harassment, flaming, excluding people, outing, and impersonation).</p> <p>7. Explain that if you encounter cyberbullying or other inappropriate content, you should immediately tell a responsible adult (e.g., teacher, parent).</p>	<p><b>Teacher's Guides:</b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher's Guide</i>  p. 31</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 30</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 30</p> <p><b>Student Resources:</b>  <i>Keyboarding</i> (Grade 3)  Digital Citizenship Assessment</p> <p><i>Keyboarding Success</i> (Grade 4)  Digital Citizenship Assessment</p> <p><i>Can-Do Keyboarding</i> (Grade 5)  Digital Citizenship Assessment</p>
<p><b>Ethics and Laws [3-5.CAS.b]</b></p>	
<p>1. Demonstrate responsible use of computers, peripheral devices, and resources as outlined in school rules [Acceptable Use Policy (AUP)].</p>	<p><b>Teacher's Guides:</b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher's Guide</i>  pp. 22, 40, 41</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  pp. 22, 38, 39</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  pp. 22, 38, 39</p> <p><b>Student Resources:</b>  <i>Keyboarding</i> (Grade 3)  Digital Citizenship Assessment</p> <p><i>Keyboarding Success</i> (Grade 4)  Digital Citizenship Assessment</p> <p><i>Can-Do Keyboarding</i> (Grade 5)  Digital Citizenship Assessment</p>

<ol style="list-style-type: none"> <li>2. Describe the difference between digital artifacts that are open or free and those that are protected by copyright.</li> <li>3. Explain the guidelines for the fair use of downloading, sharing, or modifying of digital artifacts.</li> <li>4. Describe the purpose of copyright and the possible consequences for inappropriate use of digital artifacts that are protected by copyright.</li> </ol>	<p><b>Teacher's Guides:</b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher's Guide</i>  pp. 22, 32</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  pp. 22, 31</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  pp. 22, 31</p> <p><b>Student Resources</b>  <i>Keyboarding (Grade 3)</i>  Digital Citizenship Assessment</p> <p><i>Keyboarding Success (Grade 4)</i>  Digital Citizenship Assessment</p> <p><i>Can-Do Keyboarding (Grade 5)</i>  Digital Citizenship Assessment</p>
<ol style="list-style-type: none"> <li>5. Explain that laws exist (e.g., Section 508, Telecommunication Act of 1996) that help ensure that people with disabilities can access electronic and information technology.</li> </ol>	<p>N/A</p>
<p><b>Interpersonal and Societal Impact [3-5.CAS.c]</b></p>	<p><b>Keyboarding Without Tears [KWT]</b></p>
<ol style="list-style-type: none"> <li>1. Explain the different forms of web advertising (e.g., search ads, pay-per-click ads, banner ads, targeted ads, in-game ads, email ads).</li> <li>2. Explain why websites, digital resources, and artifacts may include advertisements and collect personal information.</li> </ol>	<p>N/A</p>
<ol style="list-style-type: none"> <li>3. Define the digital divide as unequal access to technology on the basis of differences, such as income, education, age, and geographic location.</li> <li>4. Use critical thinking to explain how access to technology helps empower individuals and groups (e.g., gives them access to information, the ability to communicate with others around the world, allows them to buy and sell things).</li> </ol>	<p>While Keyboarding Without Tears does not specifically teach about the digital divide, lessons do teach students where internet access can be found.</p> <p><b>Teacher's Guides:</b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher's Guide</i>  p. 33</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 32</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 32</p>



<p>5. Identify resources in the community that can give people access to technology (e.g., libraries, community centers, education programs, schools, hardware/software donation programs).</p>	<p><b>Teacher's Guides:</b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher's Guide</i>  p. 33</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 32</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 32</p>
<p>6. Identify ways in which people with disabilities access and use technology (e.g., audio players and recorders, FM listening systems, magnifiers).</p>	<p>N/A</p>
<p>7. Identify the impact of social media and cyberbullying on individuals, families, and society.</p>	<p><b>Teacher's Guides:</b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher's Guide</i>  p. 31</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 30</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 30</p>

## Grades 3–5: Digital Tools and Collaboration [DTC]

Digital Tools [3-5.DTC.a]	
1. Type five words-per-minute times grade level (e.g., for Grade 5, type 25 words/minute).	<p>Spot Check Challenges gauge students’ understanding of skills and record their speed and accuracy. Spot Checks are built in throughout the program. Speed is measured in Words Per Minute (WPM), and accuracy is measured by the percentage of correct keys hit. The enrichment activity, Teacher Custom Creation, also reports WPM and accuracy.</p> <p><b>Student Resources:</b>  <i>Keyboarding</i> (Grade 3)            Spot Check Challenges (Weeks 9, 12, 15, 18, 21, 24, 27, 30, 33, 36)</p> <p><i>Keyboarding Success</i> (Grade 4)            Spot Check Challenges (Weeks 9, 12, 15, 18, 21, 24, 27, 30, 33, 36)</p> <p><i>Can-Do Keyboarding</i> (Grade 5)            Spot Check Challenges (Weeks 9, 12, 15, 18, 21, 24, 27, 30, 33, 36)</p>
2. Navigate between local, networked, or online/cloud environments and transfer files between each (upload/download).	N/A
3. Use digital tools (local and online) to manipulate and publish multimedia artifacts.	<p><b>Student Resources:</b>  <i>Keyboarding</i> (Grade 3)            Enrichment Activity, My Choice Keyboarding</p> <p><i>Keyboarding Success</i> (Grade 4)            Enrichment Activity, My Choice Keyboarding</p> <p><i>Can-Do Keyboarding</i> (Grade 5)            Enrichment Activity, My Choice Keyboarding</p>
Collaboration and Communication [3-5.DTC.b]	
1. Communicate key ideas and details individually or collaboratively in a way that informs, persuades, and/or entertains using digital tools and media-rich resources.	<p><b>Student Resources:</b>  <i>Keyboarding</i> (Grade 3)            Enrichment Activity, My Choice Keyboarding</p> <p><i>Keyboarding Success</i> (Grade 4)            Enrichment Activity, My Choice Keyboarding</p> <p><i>Can-Do Keyboarding</i> (Grade 5)            Enrichment Activity, My Choice Keyboarding</p>
2. Collaborate through online digital tools under teacher supervision.	N/A

<b>Research [3-5.DTC.c]</b>	
<ol style="list-style-type: none"> <li>1. Identify digital information sources to answer research questions (e.g., online library catalog, online encyclopedias, databases, websites).</li> <li>2. Perform searches to locate information using two or more key words and techniques to refine and limit such searches.</li> </ol>	<p><b><u>Teacher's Guides</u></b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher's Guide</i>  pp. 25, 32</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  pp. 25, 31</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  pp. 25, 31</p>
<ol style="list-style-type: none"> <li>3. Evaluate digital sources for accuracy, relevancy, and appropriateness.</li> </ol>	<p><b><u>Teacher's Guides</u></b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher's Guide</i>  p. 25</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 25</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 25</p>
<ol style="list-style-type: none"> <li>4. Gather and organize information from digital sources by quoting, paraphrasing, and/or summarizing.</li> <li>5. Create an artifact that answers a research question and clearly communicates thoughts and ideas.</li> </ol>	<p>N/A</p>
<ol style="list-style-type: none"> <li>6. Cite text-based sources using a school- or district-adopted format.</li> <li>7. Provide basic source information [e.g., Uniform Resource Locator (URL), date accessed] for non-text-based sources (e.g., images, audio, video).</li> </ol>	<p><b><u>Teacher's Guides</u></b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher's Guide</i>  p. 32</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 31</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 31</p>

## Grades 3–5: Computing Systems [CS]

<b>Computing Devices [3-5.CS.a]</b>	
<ol style="list-style-type: none"> <li>1. Identify a broad range of computing devices (e.g., computers, smart phones, tablets, robots, e-textiles) and appropriate uses for them.</li> <li>2. Describe the function and purpose of various input and output devices (e.g., monitor, keyboard, speakers, controller, probes, sensors, Bluetooth transmitters, synthesizers).</li> <li>3. Demonstrate an appropriate level of proficiency (connect and record data, print, send command, connect to Internet, search) in using a range of computing devices (e.g., probes, sensors, printers, robots, computers).</li> <li>4. Identify and solve simple hardware and software problems that may occur during everyday use (e.g., power, connections, application window, or toolbar).</li> <li>5. Describe the differences between hardware and software.</li> </ol>	<p>Keyboarding Without Tears provides the materials necessary for teachers to discuss topics such as input and output devices, teach proficiency with various computing devices, and troubleshoot. Our curriculum does not explicitly teach these topics, although we recommend that they be addressed within our Let’s Talk Technology lessons.</p> <p><b>Teacher’s Guides</b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher’s Guide</i>            p. 40</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher’s Guide</i>            p. 38</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher’s Guide</i>            p. 38</p>
<ol style="list-style-type: none"> <li>6. Identify and explain that some computing functions are always active (e.g., locations function on smart phones).</li> </ol>	<p>N/A</p>
<b>Human and Computer Partnerships [3-5.CS.b]</b>	
<ol style="list-style-type: none"> <li>1. Compare and contrast human and computer performance on similar tasks (e.g., sorting alphabetically, finding a path across a cluttered room) to understand which is best suited to the task.</li> <li>2. Explain how hardware and applications [e.g., Global Positioning System (GPS) navigation for driving directions, text-to-speech translation, language translation] can enable everyone, including people with disabilities, to do things they could not do otherwise.</li> <li>3. Explain advantages and limitations of technology (e.g., a spell-checker can check thousands of words faster than a human could look them up, however, a spell-checker might not know whether ‘underserved’ is correct or if the author’s intent was to type ‘undeserved’).</li> </ol>	<p>Keyboarding Without Tears does not explicitly instruct students on human v. computer performance or the advantages and disadvantages of different technologies to different people. However, we do provide ‘technology word cards’ for teachers to help facilitate discussion on various types of hardware and software applications.</p> <p><b>Teacher’s Guides</b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher’s Guide</i>            p. 40</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher’s Guide</i>            p. 38</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher’s Guide</i>            p. 38</p>

<b>Networks [3-5.CS.c]</b>	
1. Describe how a network is made up of a variety of components and identify the common components (e.g., links, nodes, networking devices).	N/A
2. Describe the need for authentication of users and devices as it relates to access permissions, privacy, and security.	<p><b>Teacher's Guides:</b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher's Guide</i>  pp. 23, 30</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  pp. 23, 29</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  pp. 23, 29</p> <p><b>Student Resources:</b>  <i>Keyboarding</i> (Grade 3)  Digital Citizenship Assessment</p> <p><i>Keyboarding Success</i> (Grade 4)  Digital Citizenship Assessment</p> <p><i>Can-Do Keyboarding</i> (Grade 5)  Digital Citizenship Assessment</p>
3. Define and explain why devices are numbered/labeled in networks [e.g., the World Wide Web Uniform Resource Locator (URL), the Internet Protocol (IP) address, the Machine Access Code (MAC)].	N/A
4. Recognize that there are many sources of and means for accessing information within a network (e.g., websites, email protocols, search engines)	<p><b>Teacher's Guides</b>  <i>3<sup>rd</sup> Grade Keyboarding Teacher's Guide</i>  p. 33</p> <p><i>4<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 32</p> <p><i>5<sup>th</sup> Grade Keyboarding Teacher's Guide</i>  p. 32</p>
<b>Services [3-5.CS.d]</b>	
1. Identify common services (e.g., driving directions apps that access remote map services, digital personal assistants that access remote information services).	N/A

## Grades 3–5: Computational Thinking [CT]

<b>Abstraction [3-5.CT.a]</b>	
<ol style="list-style-type: none"><li>1. Use numbers or letters to represent information in another form (e.g., secret codes, Roman numerals, abbreviations).</li><li>2. Organize information in different ways to make it more useful/relevant (e.g., sorting, tables).</li><li>3. Make a list of sub-problems to consider, while addressing a larger problem.</li></ol>	N/A
<b>Algorithms [3-5.CT.b]</b>	
<ol style="list-style-type: none"><li>1. Define an algorithm as a sequence of instructions that can be processed by a computer.</li><li>2. Recognize that different solutions exist for the same problem (or sub-problem).</li><li>3. Use logical reasoning to predict outcomes of an algorithm.</li><li>4. Individually and collaboratively create an algorithm to solve a problem.</li><li>5. Detect and correct logical errors in various algorithms (e.g., written, mapped, live action, or digital).</li></ol>	N/A
<b>Data [3-5.CT.c]</b>	
<ol style="list-style-type: none"><li>1. Describe examples of databases.</li><li>2. Individually and collaboratively collect and manipulate data to answer a question using a variety of computing methods and tools to collect, organize, graph, and analyze data.</li></ol>	N/A
<b>Programming and Development [3-5.CT.d]</b>	
<ol style="list-style-type: none"><li>1. Individually and collaboratively create, test, and modify a program in a graphical environment.</li><li>2. Use arithmetic operators, conditionals, and repetition in programs.</li><li>3. Use interactive debugging to detect and correct simple program errors.</li><li>4. Recognize that programs need known starting values.</li></ol>	N/A
<b>Modeling and Simulation [3-5.CT.e]</b>	
<ol style="list-style-type: none"><li>1. Individually and collaboratively create a simple model of a system.</li><li>2. Identify the concepts, features, and behaviors illustrated by a simulation.</li><li>3. Individually and collaboratively, use data from a simulation to answer a question.</li></ol>	N/A



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