

Handwriting & Keyboarding:

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# Standards for the Production & Presentation of Writing

# Introduction

## Handwriting & Keyboarding: Standards for the Production & Presentation of Writing

Both handwriting and keyboarding are skills students need to master and produce effective written work. These two skills work together in the classroom to create an engaged, balanced, and successful learning environment. Handwriting is taught in the beginning of elementary school and is mastered toward the end of the elementary years. Keyboards are increasingly being introduced in the elementary environment, generally in third or fourth grade, with fluency expected in middle school. Both handwriting and keyboarding are essential life-long skills that develop through proper instruction over time.

With the introduction of the Common Core State Standards, which require children to have “sufficient command of a keyboard by fourth grade” along with legible handwriting in earlier grades, schools are trying to determine what is appropriate by grade level in terms of both writing skills.

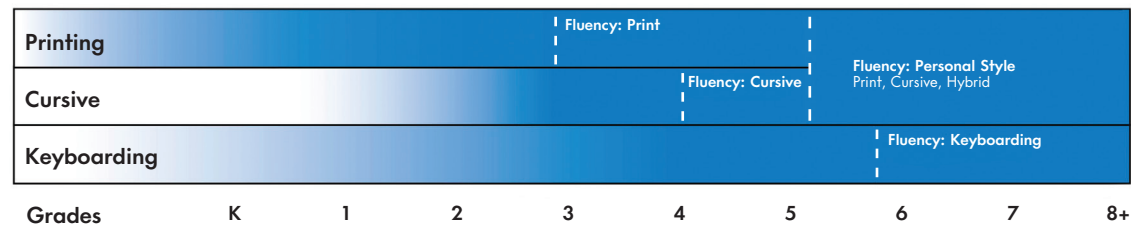
These two skills require very different forms of instruction. The techniques and timing for teaching them is critical in order to adhere to developmental appropriate instruction in the classroom. There are numerous research studies and articles that establish the relation between writing and keyboarding (Berninger 2009, Goldberg 2003, Cook 2007). As a rule, research states that learning how to write by hand before keyboarding is a necessary motor exercise as it helps develop eye-hand coordination motor skills (Saperstein 2012, James 2006 and 2012, Berninger 2012). Handwriting is a foundation skill that needs to be developed first and will influence students’ reading, writing, language use, and critical thinking.

The milestones for written production start in kindergarten. Pre-K students are still working on letter recognition and developing the fine motor skills for effective printing. Computer work should be limited to pre-keyboarding and mouse skills.

Through fine motor development, multisensory activities, and printing practice, most children achieve printing fluency in third grade and cursive fluency in fifth. This is when they develop their personal style that continues into middle and high school. Students who start keyboarding by third grade will develop fluency by sixth grade.

Once students develop fluency with print and personalization and speed with cursive handwriting, combine keyboarding with letter-recognition and hand-eye coordination. Activities in third grade or higher provide a developmentally appropriate skill that helps reinforce classroom learning and develop fine motor skills.

Where Handwriting & Keyboarding Intersect



# Introduction

## The Standards

These standards can help guide your instruction to make sure that children are learning to write and type in a developmental order that promotes success.


The standards in this document were developed by a team of occupational therapists, teachers, and field experts. They are based on current research about handwriting, keyboarding, and technology use in early education classrooms. Visit [hwtears.com/research](http://hwtears.com/research) to see the full Research Review behind the standards. The best way to view this developmental progression is to look at the standards side-by-side by grade level.

Students should begin keyboarding in third grade and be expected to use those skills in fourth and fifth grade. Since fluency for printing has often developed by third grade and cursive fluency is emerging, beginning keyboarding around this time is developmentally appropriate. Furthermore, by third grade children have both increased attention to tasks as well as improved motor control. This makes learning to touch type easier.

In this document, you will find handwriting and keyboarding standards for each grade level from kindergarten through fifth grade and higher.

### The standards provide:

- Expectations for student handwriting and keyboarding performance
- Standards for pre-writing and pre-keyboarding skills
- A framework for evaluating classroom instruction approaches
- Tools for educating others about handwriting standards for elementary education

 **Second Grade: Printing Skills**

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**2.1 Physical Approaches & Skill Development**  
Students will demonstrate physical development needed for writing.  
Each student will:

- Use a correct and efficient pencil grip for writing
- Stabilize paper with non-writing hand while writing
- Position writing paper appropriately
- Maintain sitting posture for writing

**2.2 Letter Skills**  
Students demonstrate skills in printing letter and number skills from memory.  
Each student will:

- Demonstrate correct formation of letters and numbers
  - Start capitals at the top
  - Start numbers at the top
  - Start lowercase letters (except d and e) at the top
  - Follow standard formation sequence for letters and numbers
- Orient letters and numbers correctly (without reversals)
- Place letters and numbers on a base line (within 1/16" above or below)
- Write letters, numbers, and symbols in a grade-appropriate size
- Follow the writing guidelines of various styles of paper (double and single line)

**2.3 Word Skills**  
Students write letters together to form words.  
Each student will:

- Write names
  - Begin with a capital
  - Form each letter in a name, moving left to right
  - Write courtesy titles correctly (Mr., Mrs., Ms., Miss, Dr.)
  - Leave clearly defined space between first, last name, and last name
- Write two- to ten-letter words
  - Form each letter in the word, moving left to right
  - Use appropriate spacing (i.e., letters close together, NOT touching or overlapping)
  - Capitalize proper nouns
  - Place apostrophe correctly in possessives and contractions
  - End abbreviations with a period


**2.4 Sentence Skills**  
Students write words to express thoughts, forming sentences.  
Each student will:

- Write sentences with two to eight words
- Write from left to right, returning to left margin of subsequent lines as needed
- Use sentence writing conventions:
  - Begin with a capital
  - Leave a clearly defined space between words
  - Use ending punctuation (period, question mark, or exclamation point)
- Use commas and quotation marks to indicate speech

**2.5 Writing Conventions**  
Students will combine sentences to express ideas or opinions, using formatting conventions that are extensions of handwriting skills.  
Each student will:

- Write paragraphs using proper conventions
  - Write three- to five-sentence paragraphs
  - Indent the first line of each paragraph
  - Write titles of written works, capitalizing the first, last, and important words
- Follow the standard format for friendly letters
  - Write date, beginning at left margin or center of line
  - Write greeting, beginning at left margin
  - Write body, using paragraph skills
  - Write closing, matching starting point of date
  - Write name, matching starting point of date and closing

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 **Second Grade: Pre-Keyboarding Skills**

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**2.6 Physical Approaches & Skill Development**  
Students will demonstrate physical development needed for keyboarding.  
Each student will:

- Use proper posture and hand and body positions

**2.7 Computer Readiness & Operations**  
Students will demonstrate the understanding of parts of a computer.  
Each student will:

- Respect the computer and demonstrate safe and cooperative use of the computer
- Name the keyboard, monitor, and mouse
- Understand that the keyboard is used to put text on a monitor
- Identify and understand how to click a mouse
- Learn to open (double-click) and close a software program
- Use index finger to key in a simple passcode/command on a computer
- Use Arrow keys while participating in grade-appropriate software activities
- Use the ESC (Escape) key to return to the main menu
- Click on a basic print command

**2.8 Pre-Keyboarding Skills**  
Students understand the use of simple keyboard commands.  
Each student will:

- Use "writing" keys on a keyboard
  - Recognize that "writing" keys produce a letter, number, or symbol
  - Identify home row writing keys
  - Place correct fingers on home row keys
  - Use the Y key for YES and the N key for NO
  - Begin to type simple words using "hunt and peck" method while maintaining right-hand and left-hand keyboard orientation
  - Place correct fingers on the row above and below home row using proper finger placement
- Use "working" keys on a keyboard
  - Recognize the keys and the jobs they do: Enter, Spacebar, Shift, Arrows, Tab, Backspace
  - Use thumb on Spacebar to create spaces

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# Introduction

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## Handwriting

Handwriting standards provide guidance for assessing students' handwriting skills at every level—from readiness, to print and cursive. Educational guidelines often are limited to one standard—“produces legible handwriting”—in state language arts standards. They do not provide guidance for what a student should know by each grade level, or how to remediate knowledge gaps.

Handwriting requires matching a motor program to the formation of a letter and then executing the program. The child needs to visualize the letter, recall the formation, and then write the letter accurately. Handwriting also requires spatial organization skills which help children to visually place the letters on lines and spaces between letters and words accurately. These skills are not necessary in keyboarding.

In kindergarten, children build, then write letters to develop handwriting habits. In first through second grade, children develop fluency with printing and work on language arts skills as they develop their writing.

In third grade we introduce students to cursive. Cursive is similar to print in that children are not learning a new motor skill. Cursive will help children develop speed and fluency in writing, activate important parts of their brains, and help children with functional writing as they are still developing early keyboard skills.

### Handwriting Standards Address:

- Printing Skills
- Pre-Cursive Skills
- Cursive Skills

## Keyboarding

Keyboarding requires the memorization of letter locations, the position of the fingers on these locations, and then pressing each key with precision and timing.

Keyboarding, like handwriting, is a complex skill that requires many hours of practice and instruction. According to research, keyboarding acquisition is a process that involves three phases (Perminger, Weiss, Weintraub 2004):

- 1. Cognitive phase:** The student relies on visual feedback. The learner looks at their fingers or at the screen immediately after hitting a key.
- 2. Associative phase:** The student relies on kinesthetic cues.
- 3. Autonomous phase:** The student relies primarily on kinesthetic feedback.

### Keyboarding Standards Address:

- Pre-Keyboarding Skills
- Keyboarding Skills



## Kindergarten: Printing Skills

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### K.1 Physical Approaches & Skill Development

Students will demonstrate physical development necessary for writing.

Each student will:

- A. Use a correct and efficient pencil grip for writing
- B. Stabilize paper with non-writing hand while drawing and writing
- C. Position writing paper appropriately
- D. Maintain sitting posture for writing, coloring, and drawing

### K.2 Letter Skills

Students will demonstrate skills in printing letters and numbers from memory.

Each student will:

- A. Demonstrate correct formation of letters and numbers
  1. Start capitals at the top
  2. Start numbers at the top
  3. Start lowercase letters (except **d** and **e**) at the top
  4. Follow standard formation sequence for letters and numbers
- B. Orient letters and numbers correctly  
(with few reversals)
- C. Place letters and numbers on a base line  
(within 1/8" above or below)
- D. Write letters and numbers in a grade-appropriate size
- E. Follow the writing guidelines of various styles of paper  
(triple, double, and single lines)

### K.3 Word Skills

Students will write letters together to form words.

Each student will:

- A. Write his/her name
  1. Begin with a capital
  2. Form each letter in a name, moving left to right
- B. Write two- to five-letter words
  1. Form each letter in the word, moving left to right
  2. Use appropriate spacing (i.e., letters close together, NOT touching or overlapping)

### K.4 Sentence Skills

Students write words to express thoughts, forming sentences.

Each student will:

- A. Write simple two- to three-word sentences
- B. Write horizontally, from left to right
- C. Use sentence writing conventions:
  1. Start sentences with a capital
  2. Leave a clearly defined space between words
  3. Use ending punctuation
    - a. Use a period to end statements
    - b. Use a question mark to end questions
    - c. Use an exclamation point to end exclamations

### **K.5 Physical Approaches & Skill Development**

Students will demonstrate physical development needed for keyboarding.

Each student will:

- A. Use proper posture and hand and body positions

### **K.6 Computer Readiness & Operations**

Students will demonstrate the understanding of parts of a computer.

Each student will:

- A. Respect the computer and demonstrate safe and cooperative use of the computer
- B. Name the keyboard, monitor, and mouse
- C. Understand that the keyboard is used to put text on a monitor
- D. Identify and understand how to click a mouse
- E. Learn to open (double-click) and close a software program
- F. Use index finger to key in a simple passcode/command on a computer
- G. Use Arrow keys while participating in grade-appropriate software activities
- H. Use the ESC (Escape) key to return to the main menu
- I. Click on a basic print command

### **K.7 Pre-Keyboarding Skills**

Students understand the use of simple keyboard commands.

Each student will:

- A. Use "writing" keys on a keyboard
  1. Recognize that "writing" keys produce a letter, number, or symbol
  2. Identify home row writing keys
  3. Place correct fingers on home row keys
  4. Use the Y key for YES and the N key for NO
  5. Begin to type simple words using "hunt and peck" method while maintaining right-hand and left-hand keyboard orientation
- B. Use "working" keys on a keyboard
  1. Recognize the keys and the jobs they do: Enter, Spacebar, Shift, Arrows, Tab, Backspace
  2. Use thumb on Spacebar to create spaces



## First Grade: Printing Skills

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### 1.1 Physical Approaches & Skill Development

Students will develop necessary physical skills for handwriting.

Each student will:

- A. Use a correct and efficient pencil grip for writing
- B. Stabilize paper with non-writing hand while writing
- C. Position writing paper appropriately
- D. Maintain sitting posture for writing

### 1.2 Letter Skills

Students will demonstrate skills in printing letters and numbers from memory.

Each student will:

- A. Demonstrate correct formation of letters and numbers
  1. Start capitals at the top
  2. Start numbers at the top
  3. Start lowercase letters (except **d** and **e**) at the top
  4. Follow standard formation sequence for letters and numbers
- B. Orient letters and numbers correctly (without reversals)
- C. Place letters and numbers on a base line (within 1/16" above or below)
- D. Write letters, numbers, and symbols in a grade-appropriate size
- E. Follow the writing guidelines of various styles of paper (triple, double, and single lines)

### 1.3 Word Skills

Students write letters together to form words.

Each student will:

- A. Write names
  1. Begin each name with a capital
  2. Form each letter in a name, moving left to right
  3. Write courtesy titles correctly (Mr., Mrs., Ms., Miss, Dr.)
  4. Leave clearly defined space between title, first name, and last name
- B. Write two- to seven-letter words
  1. Form each letter in the word, moving left to right
  2. Use appropriate spacing (i.e., letters close together, NOT touching or overlapping)

### 1.4 Sentence Skills

Students write words to express thoughts, forming sentences.

Each student will:

- A. Write two- to five-word sentences
- B. Write from left to right, returning to left margin of subsequent lines as needed
- C. Use sentence writing conventions:
  1. Begin with a capital
  2. Leave a clearly defined space between words
  3. Use ending punctuation (period, question mark, or exclamation point)

### 1.5 Writing Conventions

Students will combine sentences to express ideas or opinions, using formatting conventions that are extensions of handwriting skills.

Each student will:

- A. Copy/write a short paragraph
  1. Use three to five sentences
  2. Indent the first line of a paragraph
- B. Write titles of written works, capitalizing the first, last, and important words



## First Grade: Pre-Keyboarding Skills

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### 1.5 Physical Approaches & Skill Development

Students will demonstrate physical development needed for keyboarding.

Each student will:

- A. Use proper posture and hand and body positions

### 1.6 Computer Readiness & Operations

Students will demonstrate the understanding of parts of a computer.

Each student will:

- A. Respect the computer and demonstrate safe and cooperative use of the computer
- B. Name the keyboard, monitor, and mouse
- C. Understand that the keyboard is used to put text on a monitor
- D. Identify and understand how to click a mouse
- E. Learn to open (double-click) and close a software program
- F. Use index finger to key in a simple passcode/command on a computer
- G. Use Arrow keys while participating in grade-appropriate software activities
- H. Use the ESC (Escape) key to return to the main menu
- I. Click on a basic print command

### 1.7 Pre-Keyboarding Skills

Students understand the use of simple keyboard commands.

Each student will:

- A. Use "writing" keys on a keyboard
  - 1. Recognize that "writing" keys produce a letter, number, or symbol
  - 2. Identify home row writing keys
  - 3. Place correct fingers on home row keys
  - 4. Use the Y key for YES and the N key for NO
  - 5. Begin to type simple words using "hunt and peck" method while maintaining right-hand and left-hand keyboard orientation
- B. Use "working" keys on a keyboard
  - 1. Recognize the keys and the jobs they do: Enter, Spacebar, Shift, Arrows, Tab, Backspace
  - 2. Use thumb on Spacebar to create spaces





## Second Grade: Printing Skills

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### 2.1 Physical Approaches & Skill Development

Students will demonstrate physical development needed for writing.

Each student will:

- A. Use a correct and efficient pencil grip for writing
- B. Stabilize paper with non-writing hand while writing
- C. Position writing paper appropriately
- D. Maintain sitting posture for writing

### 2.2 Letter Skills

Students demonstrate skills in printing letter and number skills from memory.

Each student will:

- A. Demonstrate correct formation of letters and numbers
  1. Start capitals at the top
  2. Start numbers at the top
  3. Start lowercase letters (except **d** and **e**) at the top
  4. Follow standard formation sequence for letters and numbers
- B. Orient letters and numbers correctly (without reversals)
- C. Place letters and numbers on a base line (within 1/16" above or below)
- D. Write letters, numbers, and symbols in a grade-appropriate size
- E. Follow the writing guidelines of various styles of paper (double and single lines)

### 2.3 Word Skills

Students write letters together to form words.

Each student will:

- A. Write names
  1. Begin with a capital
  2. Form each letter in a name, moving left to right
  3. Write courtesy titles correctly (Mr., Mrs., Ms., Miss, Dr.)
  4. Leave clearly defined space between title, first name, and last name
- B. Write two- to ten-letter words
  1. Form each letter in the word, moving left to right
  2. Use appropriate spacing (i.e., letters close together, NOT touching or overlapping)
  3. Capitalize proper nouns
  4. Place apostrophe correctly in possessives and contractions
  5. End abbreviations with a period

### 2.4 Sentence Skills

Students write words to express thoughts, forming sentences.

Each student will:

- A. Write sentences with two to eight words
- B. Write from left to right, returning to left margin of subsequent lines as needed
- C. Use sentence writing conventions:
  1. Begin with a capital
  2. Leave a clearly defined space between words
  3. Use ending punctuation (period, question mark, or exclamation point)
- D. Use commas and quotation marks to indicate speech

### 2.5 Writing Conventions

Students will combine sentences to express ideas or opinions, using formatting conventions that are extensions of handwriting skills.

Each student will:

- A. Write paragraphs using proper conventions
  1. Write three- to five-sentence paragraphs
  2. Indent the first line of each paragraph
- B. Write titles of written works, capitalizing the first, last, and important words
- C. Follow the standard format for friendly letters
  1. Write date, beginning at left margin or center of line
  2. Write greeting, beginning at left margin
  3. Write body, using paragraph skills
  4. Write closing, matching starting point of date
  5. Write name, matching starting point of date and closing



## Second Grade: Pre-Keyboarding Skills

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### 2.6 Physical Approaches & Skill Development

Students will demonstrate physical development needed for keyboarding.

Each student will:

- A. Use proper posture and hand and body positions

### 2.7 Computer Readiness & Operations

Students will demonstrate the understanding of parts of a computer.

Each student will:

- A. Respect the computer and demonstrate safe and cooperative use of the computer
- B. Name the keyboard, monitor, and mouse
- C. Understand that the keyboard is used to put text on a monitor
- D. Identify and understand how to click a mouse
- E. Learn to open (double-click) and close a software program
- F. Use index finger to key in a simple passcode/command on a computer
- G. Use Arrow keys while participating in grade-appropriate software activities
- H. Use the ESC (Escape) key to return to the main menu
- I. Click on a basic print command

### 2.8 Pre-Keyboarding Skills

Students understand the use of simple keyboard commands.

Each student will:

- A. Use "writing" keys on a keyboard
  1. Recognize that "writing" keys produce a letter, number, or symbol
  2. Identify home row writing keys
  3. Place correct fingers on home row keys
  4. Use the Y key for YES and the N key for NO
  5. Begin to type simple words using "hunt and peck" method while maintaining right-hand and left-hand keyboard orientation
  6. Place correct fingers on the row above and below home row using proper finger placement
- B. Use "working" keys on a keyboard
  1. Recognize the keys and the jobs they do: Enter, Spacebar, Shift, Arrows, Tab, Backspace
  2. Use thumb on Spacebar to create spaces



### Pre-Cursive Skills

#### 3.1 Preparation Skills

Students will demonstrate strokes needed for cursive handwriting: strokes that change direction, retrace lines, and form loops.

Each student will:

- A. Connect an under to an over stroke, moving left to right
- B. Retrace a vertical stroke
- C. Retrace a curved stroke
- D. Produce neat loops (ascending and descending)

### Cursive Skills

#### 3.2 Letter Skills

Students will demonstrate cursive writing skills efficiently from memory.

Each student will:

- A. Form lowercase letters correctly
- B. Form capitals correctly
- C. Place letters on a base line (within 1/16" above or below)
- D. Write letters in a grade-appropriate size
- E. Follow the writing guidelines of various styles of paper (double and single lines)

#### 3.3 Connection Skills

Students will join letters to form words, using standard, efficient connections.

Each student will:

- A. Demonstrate correct base line connections, maintaining letter integrity
  1. Connect base line ending to a base line start (e.g., **t** to **e**)
  2. Connect base line ending to a mid line start (e.g., **c** to **a**)
- B. Demonstrate correct high connections, maintaining letter integrity
  1. Connect a high ending to a mid line start (e.g., **o** to **u**)
  2. Connect a high ending to a base line start (e.g., **w** to **h**, **b** to **r**)

#### 3.3 Connection Skills (cont'd.)

- C. Use appropriate spacing between connected letters (i.e., close together, NOT overlapping, with only connections touching)
- D. Cross and dot appropriate letters after completing connected letters
- E. Demonstrate correct connections from capitals
  1. Write signature in cursive using correct connections
  2. Use correct connections for proper nouns

#### 3.4 Sentence Skills

Students will write words to express thoughts, forming sentences.

Each student will:

- A. Write from left to right, returning to left margin of subsequent lines as needed
- B. Use sentence writing conventions:
  1. Begin with a capital
  2. Leave a clearly defined space between words
  3. Use ending punctuation (period, question mark, or exclamation point)
- C. Use commas and quotation marks correctly to indicate speech
- D. Use commas to separate items in series and to set off clauses and phrases

#### 3.5 Writing Conventions

Students will combine sentences to express ideas or opinions, using formatting conventions that are extensions of handwriting skills.

Each student will:

- A. Write paragraphs using proper conventions
  1. Write five- to six-sentence paragraphs
  2. Indent the beginning of each paragraph
- B. Write titles of written works, capitalizing the first, last, and important words
- C. Follow the standard format for friendly letters
  1. Write date, beginning at left margin or center of line
  2. Write greeting, beginning at left margin
  3. Write body using paragraph skills
  4. Write closing, matching starting point of date
  5. Place signature, matching starting point of date and closing

### 3.6 Physical Approaches & Skill Development

Students will demonstrate physical development needed for keyboarding.

Each student will:

- A. Use proper posture and hand and body positions

### 3.7 Computer Operations

Students will demonstrate an understanding of parts of a computer and word processing tools.

Each student will:

- A. Click on a basic print command
- B. Understand the concepts of hardware, software, thumb drive, file, save, delete, edit
- C. Open a blank word processing file
- D. Understand how to save and retrieve a file

### 3.7 Keyboarding Skills

Students understand how to touch type in order to create text.

Each student will:

- A. Use "writing" keys on a keyboard
  1. Recognize that "writing" keys produce a letter, number, or symbol
  2. Identify home row writing keys
  3. Place correct fingers on home row keys
  4. Type words consisting of the home row keys using correct fingers while touch typing
  5. Place correct fingers on the row above and below home row using proper finger position
  6. Develop touch typing skills for all letter rows using correct fingers while looking minimally at hands
  7. Type correct punctuation for text
  8. Type numbers (above the letter rows) with correct home row fingers
- B. Use "working" keys on a keyboard
  1. Recognize the keys and the jobs they do: Enter, Spacebar, Shift, Arrows, Tab, Punctuation, Backspace
  2. Use thumb on Spacebar to create spaces



## Fourth Grade: Cursive Skills

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### 4.1 Letter Skills

Students demonstrate cursive writing skills efficiently from memory.

Each student will:

- A. Form lowercase letters correctly
- B. Form capitals correctly
- C. Place letters on a base line  
(within 1/16" above or below)
- D. Write letters in a grade-appropriate size
- E. Follow the writing guidelines of various styles of paper (single lines)

### 4.2 Connection Skills

Students join letters using standard, efficient connections to form words.

Each student will:

- A. Demonstrate correct base line connections, maintaining letter integrity
  1. Connect base line ending to base line start  
(e.g., **t** to **e**)
  2. Connect base line ending to mid line start  
(e.g., **c** to **a**)
- B. Demonstrate correct high connections, maintaining letter integrity
  1. Connect a high ending to mid line start  
(e.g., **o** to **u**)
  2. Connect a high ending letter to base line start  
(e.g., **w** to **h**, **b** to **r**)
- C. Use appropriate spacing between connected letters  
(i.e., close together, NOT overlapping with only connections touching)
- D. Cross and dot appropriate letters after completing connected letters
- E. Demonstrate correct connections from capitals
  1. Write signature in cursive using correct connections
  2. Use correct connections for proper nouns

### 4.4 Sentence Skills

Students will write words to express thoughts, forming sentences.

Each student will:

- A. Write from left to right, returning to left margin of subsequent lines as needed
- B. Use sentence writing conventions:
  1. Begin with a capital
  2. Leave a clearly defined space between words
  3. Use ending punctuation  
(period, question mark, or exclamation point)
- C. Use commas and quotation marks correctly to indicate speech
- D. Use commas to separate items in series and to set off clauses and phrases

### 4.5 Writing Conventions

Students will combine sentences to express ideas or opinions, using formatting conventions that are extensions of handwriting skills.

Each student will:

- A. Write paragraphs using proper conventions
  1. Write five- to six-sentence paragraphs
  2. Indent the beginning of each paragraph
- B. Write titles of written works, capitalizing the first, last, and important words
- C. Follow the standard format for business letters
  1. Write heading (return address and date) at left margin
  2. Write inside address at left margin
  3. Write salutation at left margin
  4. Write body using paragraph skills, leaving line space between paragraphs
  5. Write closing at left margin
  6. Place signature at left margin
  7. Leave line space after heading, inside address, salutation, body, closing

#### 4.6 Physical Approaches & Skill Development

Students will demonstrate physical development needed for keyboarding.

Each student will:

- A. Use proper posture and hand and body positions

#### 4.7 Computer Operations

Students will demonstrate an understanding of parts of a computer and word processing tools.

Each student will:

- A. Understand the concepts of hardware, software, thumb drive, file, save, delete, edit
- B. Open a blank word processing file
- C. Understand how to save and retrieve a file

#### 4.8 Keyboarding Skills

Students understand how to touch type in order to create text.

Each student will:

- A. Use touch typing to create text
  1. Identify and consistently use the home row keys with proper finger position
  2. Extend touch typing skills to the row above and below the home row keys using the proper fingers
  3. Review and demonstrate the proper keyboarding technique for each letter of the alphabet
  4. Consistently use Shift key to produce capitals
  5. Use both hands for letter, word, and sentence drills without looking at the keyboard
  6. Type name, words, lists, and sentences without looking at the keyboard
  7. Type most text in a one-page document without looking at the keyboard
  8. Use written language skills (e.g., capitalization, punctuation, spelling, etc.) as grade appropriate

#### 4.8 Keyboarding Skills (cont'd.)

- B. Use "working" keys on a keyboard
  1. Use keyboard features: Enter, Spacebar, Shift, Arrows, Tab, Backspace
  2. Use thumb on Spacebar to create spaces after words and punctuation
  3. Press the Shift key for capitals
  4. Press the Shift key to use symbols at the top of number and symbol keys



## Fifth Grade+: Keyboarding Skills

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### 5.6 Physical Approaches & Skill Development

Students will demonstrate physical development needed for keyboarding.

Each student will:

- A. Use proper posture and hand and body positions

### 5.7 Computer Operations

Students will demonstrate an understanding of word processing tools.

Each student will:

- A. Experiment with formatting tools
- B. Use removable media to save files (e.g., disks, thumb drive, etc.)
- C. Insert tables and other images into file
- D. Set up a file with correct line spacing, indentation, justification
- E. Share files with others

### 5.8 Keyboarding Skills

Students utilize touch typing in order to create text.

Each student will:

- A. Use touch typing to create text
  1. Identify and consistently use the home row keys with proper finger position
  2. Extend touch typing skills to the row above and below the home row keys using the proper fingers
  3. Review and demonstrate proper keyboarding technique for each letter of the alphabet
  4. Consistently use Shift key to produce capitals
  5. Use both hands for letter, word, and sentence drills without looking at the keyboard
  6. Type all text in a two-page document without looking at the keyboard
  7. Use written language skills (e.g., capitalization, punctuation, spelling, etc.) as grade appropriate
  8. Build accuracy

### 5.8 Keyboarding Skills (cont'd.)

- B. Use "working" keys on a keyboard
  1. Use keyboard features of Enter, Spacebar, Shift, Arrows, Tab, Backspace
  2. Use thumb on Spacebar to create spaces after words and punctuation
  3. Press the Shift key for capitals
  4. Press the Shift key to use symbols at the top of number and symbol keys
  5. Use common short cut keys

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