# AT & App Supports for Writing in the Common Core Standards

## **Common Core Standards for Writing**

"Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades. The expected growth in student writing ability is reflected both in the standards themselves and in the collection of annotated student writing samples."

http://www.corestandards.org/ELA-Literacy/W/introduction

## Common Core State Standards (CCSS) English/Language Arts – Literacy

- · Writing divided into 4 Areas
- · Skills represented at each K-12 grade levels
  - 1) Text Types and Purposes,
  - 2) Production and Distribution of Writing,
  - 3) Research to Build and Present Knowledge, and
  - 4) Range of Writing.

## **Text Types & Purposes**

#### (Kindergarten)

- Starts with Opinion, informative, or narrate event by drawing, dictation & writing
- · Provide topic, facts, closure to writing
- · Narratives with sequenced order
- · Opinion writing with linking words, reasons, concluding statements
- · Explanatory texts with definitions, explanatory points, conclusions

(Grade 3 ramps up significantly the number of skills being worked on in this area each year)

- · Organizational structure with lists of reasons, Linking words and phrases
- Sections in writing
- $\cdot$  Informative texts examine topic, convey ideas, group ideas, include illustrations, include linking words and conclusions
- · Narratives of real or imagined situations with descriptions of thought, action, feelings, etc.
- · Use of temporal words
- · Facts & Details
- · Domain Specific Vocabulary
- Dialog and description
- Logical order to opinion pieces

#### (Grade 6)

- · Writes arguments
- · Support claims
- · Technical writing
- · Establish and maintain a formal style

### (Grade 9)

- Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence
- · Develop claim(s) and counterclaims fairly, supplying evidence
- · Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.

## **Production & Distribution of Writing**

### (Kindergarten)

- Digital tools for publishing
- · Incorporate feedback to strengthen writing
- · Revising and editing from feedback
- · Produce and publish writing

#### (Grade 3)

- · Planning, writing, editing process
- · Include internet
- · Task, purpose and audience
- Demonstrate keyboarding skills
- · Command of language standards

### (Grade 6)

- · Clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience
- · Planning, revising, editing, rewriting, or trying a new approach
- Use of technology to collaborate with others
- · Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences

#### (Grade 9)

· Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative

## Research to Build & Present Knowledge

- · Participate in shared research
- · Recall and gather information
- · Read "how to" material & write sequence of instructions
- · Shared reading and writing with peers
- · Conduct short research projects
- · Gather information from print and digital sources
- · Take notes
- Apply reading standards to informational texts
- · Draw evidence from literary or informational texts to support analysis, reflection, and research.
- · Use technology, including the Internet, to produce, publish, and update individual or shared writing products
- · Use technology's capacity to link to other information and to display information flexibly and dynamically.

#### Range of Writing

- · Standards in this area begin in Grade 3
- · Write routinely over time for short timeframes
- Write for extended timeframes
- · Reflection

(Grade 6-12 Writing in History, Social Studies, Science, & Technical Subjects)

"The CCR anchor standards and high school standards in literacy work in tandem to define college and career readiness expectations—the former providing broad standards, the latter providing additional specificity." <a href="https://www.corestatestandards.org">www.corestatestandards.org</a>

## Finding a "Pencil" for Every Student

## What is Assistive Writing?

- · takes the place of (alternative) or augments pen/pencil
- · produces a hard copy
- · may need to be portable
- · a tool to allow student to meet the writing requirements of the curriculum

## What Assistive Writing Technology is NOT!

- · not computer-aided instruction
- · not the only tool to be considered
- · not the answer to all writing situations/needs

## Follow all the processes that you use and know already.

- · Universal Design for Learning (www.cast.org/udl )
- · SETT Framework (www.joyzabala.com)
- · Feature Matching for product/system/app selection

## **The Writing Process**

Getting Started: Prewriting
Sloppy Copy: First Draft
Hamming it Up: Revision
Tuning It Up: Editing
Neat Sheet: Final Copy

6. Publishing: Sharing and Celebrating

"There is not another academic skill that demands that a child bring together as many different neurodevelopmental functions as are required for writing."

~Dr. Mel Levine

http://www.allkindsofminds.org/

#### Graphomotor

Graphomotor function refers to the ability to use muscles in the fingers and hands to form letters easily and legibly and to maintain a comfortable grip on a writing instrument. This function plays an important role in maneuvering a pen or pencil and allowing the fingers to keep pace with the flow of ideas.

- Coordinating small muscles of the fingers needed to form letters
- Signs of writing problems:
- o Finds it hard to form letters
- Has difficulty manipulating a pencil
- Grips a pencil uncomfortably tightly
- Holds a pencil in an awkward manner
- Struggles to coordinate small muscles to keep up with the flow of ideas

#### **Possible Solutions**

Pens & Pencil Grips

Raised Paper

Slant Boards

Templates

Labels

Magnetic Letters

Fonts

Dictation

 Portable Word Processors

Onscreen Keyboards

• Speech Recognition

#### **Attention**

Attention plays an important role in all stages of writing. This task often demands considerable mental energy and focus over long periods of time. Writers must not only preview what they want to convey as they put their ideas on paper, but also continually self-monitor to stay on track.

- Maintaining concentration and self-monitoring work
- Signs of writing problems:
  - Is distracted or fidgety during writing tasks
  - Loses one's place while writing
  - Appears mentally fatigued or overly tired while writing
  - Doesn't exert effort if topic is not personally interesting
  - o Is unable to get started on writing assignments

#### **Possible Solutions**

- Emphasize Key Information
- Preview, Plan & Monitor
- Edit Talking Word Processors

- Talking Word Processors
- Microsoft Word Report Wizard, Templates

## **Language Production**

Language is an essential ingredient of writing. The ability to recognize letter sounds, comprehend words and their meanings, understand word order and grammar to construct sentences, and describe or explain ideas all contribute to a child's ability to write clearly.

- Using words and forming sentences correctly
- Signs of writing problems:
  - Has difficulty with word sounds or meaning
  - o Cannot easily spell words so they reflect the way they are pronounced
  - Finds oral expression difficult
  - Struggles with sentence structure and proper word order
  - Has trouble reading back what is written

### **Possible Solutions**

- Dictionaries
- Inspiration
- Spell Checkers
- Microsoft Word
- Word Prediction
- TextHelp
- Kurzweil ~ WYNN

- Earobics
- Ultimate Phonics
- Simon SIO
- SOLO
- Clicker 5
- Write:OnLine
- E-pals

## Memory

Memory ability has a significant impact on writing. The rate at which children generate ideas must coincide with their retrieval of necessary vocabulary, spelling, and prior knowledge. When organizing essays, writers must be able to think about a topic, draw upon facts and concepts, and sequence ideas and facts in the right order.

- Recalling letters, rules and ideas
- Signs of writing problems:
  - Cannot easily recall letter formation.
  - o Cannot easily recall rules of spelling, grammar, punctuation
  - o Presents ideas out of sequence
  - Has trouble accessing prior knowledge while writing
  - Struggles to organize ideas while writing

#### **Possible Solutions**

- Desktop Helpers
- Concept maps or mapping software
- Speaking Homework Wiz

Strategies

Break Processes into steps Mnemonic strategies

> **POWER COPS**

**P**...Plan the paper Capitalization **O**missions O...Organize your ideas **W**...Write the draft **P**unctuation **E**...Edit your work **S**pelling

R...Revise

## **Higher Order Cognition**

In the upper grades, writing relies on higher-order cognitive functions. Assignments often require students to generate original and creative ideas while integrating spelling, grammar, and punctuation rules. By early adolescence, many written assignments demand critical thinking skills and conceptual ability such as evaluating opposing arguments and drawing conclusions.

- Generating ideas and taking a stepwise approach to plan/revise
- Signs of writing problems:
  - o Cannot easily generate ideas or elaborate on them in writing
  - Has difficulty with writing tasks requiring creativity and/or critical thinking
  - Finds organizing writing tasks difficult

## **Higher Order Cognition involves** (allkindsofminds.org)

Concept Formation/Transformation – Integrating ideas that go together

Critical Thinking – evaluating ideas and opinions

Creativity – independent thinking and self-generated thoughts

Problem Solving – applying a strategic approach to complex questions

Rule Use – Learning, developing, and applying rules and principles

Logical thinking/Reasoning – generating answers to complex issues

Mental Representation – portraying new ideas so they are meaningful and lasting

## **Helpful hints**

Create an environment for risk taking and promotes innovative thinking

Encourage areas of focused interest

Allow students to select materials, projects, reading texts, writing topics, spelling words Use high interest subject matter for creative activities

Allow students to create products using different formats

Comics, TV scripts, magazine articles, song lyrics

Develop activities that help the students' ability to think ahead, or predict possible outcomes

Collaborative activities, working in teams

Write using story starters

In social studies, students have students make predictions about historical events

Have students estimate answers to science experiments

Provide a strategy sheet for problem solving with

estimation, prediction and outcome comparison

### **Possible Solutions**

**Note Taking** (Is difficult, be able to listen and writing at the same time, fine motor speed, Saliency determination required, recall, and sequencing)

**Note Taking – Outline/Web** www.learningthroughlistening.org **Graphic Organizers** 

Web Resources:

Design and print different graphic organizers. You don't have to be an artist to do it! <a href="http://teachers.teach-nology.com/web\_tools/graphic\_org/">http://teachers.teach-nology.com/web\_tools/graphic\_org/</a>

http://www.eduplace.com/kids/hme/6\_8/graphorg/

### **Brainstorm Ideas/Lists**

Generate ideas apart from writing

Record ideas in list form

Record ideas into a tape recorder

**Kidspiration/Inspiration:** Super Grouper - Rapid fire mode for brainstorming and listing ideas **Writer's Companion -** Systematically walks students through the writing process.

Solo - Students learn the "Process of Writing"

- 1. Outlining and Mapping
- 2. Add notes and expand outline
- 3. Synthesize outline and notes into a draft

Provides auditory feedback

Students can work in outline view, diagram view or both.