

Writing by Design®

Writing Research and Program Rationale

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1. Writing Research

Writing by Design® curriculum incorporates findings from three converging areas of writing research. First, the protocols of *Writing by Design*® align with findings that student achievement is higher when writing is taught as a process (*Parson, 1985; Hillocks, 1984, 1986; Applebee, 1981*). Second, the inclusion of Six Traits Writing is supported by Northwest Regional Educational Laboratory’s studied application of the benefits of the Six Traits of Writing structure in schools across the country. Third, the program design “chunks” the skills and knowledge within genres, with students attaining mastery of each genre before the next is introduced. Genres are repeated, with increased complexity, from grade level to grade level. This is consistent with the findings that English Learners benefit from a wide array of curricular approaches to strategy use in a manner designed to cultivate deep knowledge and application of those strategies in reading and writing over an extended period of time (Olson and Land, 2007).

A. Process Writing

According to Hayes (1996) and Hayes and Flowers (1980; 1987) and Bereiter and Scardamalia (1987), writing is a complex endeavor that involves recursive and nonlinear processes. Writers use three cognitive processes - planning, sentence generation, and revising - to accomplish their writing goals, moving back and forth between different processes as they write.

Planning: Writing involves extensive planning, organizing, and goal setting (Flowers and Hayes, 1981, Bereiter and Scardamalia, 1987). Writers begin with goals or ideas and prepare and organize information for presentation, activating background knowledge and researching new information to accomplish writing goals. In the planning phase, writers develop a sense of audience and a context for their writing,

taking the perspective of their readers to focus their efforts. Organization is also a key feature of the planning process. Writers attend to text patterns and organizational frameworks as they prepare their writing.

Sentence Generation: During this phase, writers translate their ideas into language and written words to build a coherent text in order to express meaning. In sentence generation, writers mentally prepare sentence parts for transcription into writing. To accomplish this task, writers need appropriate linguistic knowledge and facility. They must be able to choose words and grammatical constructions that best convey meaning. Vocabulary, morphology, and syntax conventions must be understood and accessible to writers in order to convey meaning with fluency and to generate written language appropriate for the intended audience (Webster, 2004).

Revising: Revision involves reviewing and evaluating written work to improve the meaning and text structure of the writing. Revising involves reading, identifying weaknesses, and repairing texts. Writers need to be able to identify areas of text requiring attention and to vary spelling, usage, vocabulary, cohesion, and text structure in order to convey the desired meaning to their audience (Webster, 2004).

Writing by Design[®] provides support for writers at each stage of the writing process. Intentional, strategic teacher modeling provides foundational support for student learning of multi-faceted writing tasks. Through modeling, teachers can demonstrate how to think through each process of writing – how to plan, how to create the written word, and how to apply improvements through revision. Instruction includes shared writing, whereby students begin to apply what the teacher has modeled through group participation as the teacher scribes, with the teacher “thinking aloud” to support students’ meta-cognition for writing. While teachers have flexibility and choices in topics and approaches, and are not tied to a lesson script, grade-level teaching manuals provide complete lesson plans. Lessons are designed with structured student practice, revision, and sharing of each written piece. Color-coded writing posters provide visual support, structure initial instruction, and serve as ongoing references throughout each genre study. Students receive additional support through **Writing by Design**[®] recommended picture books to frontload knowledge and information and provide cultural references to connect student learning.

B. Six Traits of Writing

A traits-based approach to writing instruction is supported by a meta-analysis of 20 years of research on student writing conducted by Hillocks (1987). He reviewed 2,000 studies on the process of writing and identified the following six instructional methodologies commonly adopted as a curriculum or program focus: (1) grammar – teaching parts of speech and parsing of sentences; (2) models – presenting good pieces of writing that show particular structures of modes; (3) sentence combining – building complex sentences from simpler examples; (4) scales – training students to use sets of criteria to judge the quality of their work; (5) inquiry – transforming data and information to generalizations or arguments for writing tasks; and (6) free writing – having students

write freely about whatever interests them (*Hillocks, 1987, Synthesis of Research on Teaching Writing, Educational Leadership, 44(8), 71-76, 78, 80-82*).

Writing by Design® builds upon the Six Traits Writing Model. Developed at Northwest Regional Laboratory and used by more than 15,000 teachers over the past two decades, the Six Traits Writing Model is an approach to teaching and assessing student writing that focuses on six traits that characterize quality writing:

1. Ideas - the main message
2. Organization - the internal structure of the piece; the thread of the meaning and the logical pattern of the ideas
3. Voice – the personal tone and feelings of the author’s voice
4. Word Choice – the vocabulary the writer chooses to convey meaning
5. Sentence Fluency - the flow of language and sound of word patterns
6. Conventions - the mechanical correctness

The Six Traits Writing Model is a process-oriented approach to teaching and assessing writing. In Six Traits and **Writing by Design**®, teachers introduce each trait one at a time in a cumulative sequence. As they become familiar with each trait and the contents of the each trait’s scoring rubric, students participate in planning, translating, and revising their written work. Students write pieces in various forms and modes, and participate in peer and group revisions focused on selected traits. The teacher conducts frequent whole-group scoring and discussion sessions and reads frequently to students from a wide variety of quality written material, followed by discussion of the use of selected traits by the author.

Teachers begin each year’s instruction by introducing/reviewing the Six Traits through structured lessons outlined in the program’s teaching manuals. As they introduce each genre, color coded-posters structure the instruction by cross referencing applicable components of the Six Traits with components of the genre.

As students progress through the program from year to year, data on participating schools shows increasingly improved writing scores as students internalize and apply what they have learned in prior years.

Writing by Design® uses direct instruction to link process writing and the Six Traits. Writing processes of planning, translating, and revising are learned in context as teachers explicitly teach text structures **Writing by Design**® instruction involves (1) clear and specific objectives, (2) materials and problems selected to engage students with each other in specific processes important to an aspect or trait of writing, and (3) activities, such as small-group, problem-centered discussions, conducive to high levels of peer interactions. These instructional components were found to be over four times more effective than traditional writing instruction models (Gersten and Baker, 1999, 2001). Through the use of job charts and modeling, the concrete tasks of direct instruction make objectives operationally clear by engaging students in their pursuit through structured tasks (p.122, Hillocks, 1986, *Research on Written Composition, Directions for Teaching*:

Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills, 1986. ED 265 552).

C. Principles of Instruction

In their book, *Effective Teaching Strategies that Accommodate Diverse Learners* (Kame'enui, Carnine, Dixon, Simmons, Coyne, 2002), Kame'enui et al. identify six major principles of effective instructional tools. Based on the extensive reviews of literature conducted by researchers at the National Center to Improve the Tools of Educators (NCITE, 2001), these tools represent effective and validated instructional strategies for teaching students with diverse learning and curricular needs. They serve the dual purposes of synthesizing teacher-directed and student-directed learning and incorporating the basics in the quest for higher-order thinking (Kame'enui et al., p. 7).

1. Big Ideas: Highly selected concepts, principles, rules, strategies, or heuristics that facilitate the most efficient and broadest acquisition of knowledge.

Writing by Design® curriculum incorporates the three current “big ideas” in the field of writing: process writing, text structure, and peer interaction. Because process writing alone is not sufficient for consistent results in writing, *Writing by Design*® provides explicit instruction in the Writing Process combined with explicit instruction in text structure. Englert et al. (1991) found that the combination of specific instruction about each writing genre and identification of its own structural characteristics and process writing shows powerful results in increasing student achievement, particularly for students with learning differences. Further, students who receive instruction that focuses on limited text structures within defined learning periods showed mastery and transference of skills more effectively than students whose programs taught many structures. Collaborative work has been proven to be an effective instructional tool in many subject matter domains. In writing, peer interaction has a particular benefit; students working with others have the opportunity to participate in authoring, editing, and revising – learning to bridge sentences, spell effectively, and use appropriate grammar within the context of their writing. These collaborative work opportunities are embedded in *Writing by Design*® instruction, through whole-class instruction, peer reviews, and shared writing.

2. Conspicuous Strategies: Sequence of teaching events and teacher actions that make explicit the steps in learning. They are made conspicuous by the use of visual maps or models, verbal directions, full and clear explanations, etc.

Conspicuous strategy instruction has been used with promising results to teach all phases of the writing process: planning (Harris & Graham, 1985), text structure (Englert et al., 1991; Graham and Harris, 1989), and revising (MacArthur, Graham, and Schwartz, 1991) (all as reported in Kame'enui et al., 2002). *Writing by Design*® incorporates conspicuous strategy instruction through its use of organizational frameworks and expectations for genres and text structures, rubric-design, picture book models, model

papers, and job charts which break writing tasks into chunks that build cumulatively over time.

3. Mediated Scaffolding: Temporary support for students to learn materials. Scaffolding is faded over time.

Scaffolding and guidance are integral components of conspicuous strategy instruction and the *Writing by Design*® instructional process. Initial scaffolding is gradually faded over time and students learn strategies to regulate their own learning. When students have the underlying competencies in place, but struggle with the complexity of a task, activities are scaffolded through the use of visuals (such as the posters), model papers provided by the program, teacher modeling, and shared writing. Procedural facilitators such as planning sheets (other examples) are used routinely to guide students in beginning the writing process, while collaborative work with peers offers scaffolding to students as they pursue the editing and revising processes. (Editing think sheets, check lists related to genre, etc.).

4. Strategic Integration: Intentional consideration and sequencing of instruction in ways that show commonalities and differences between old and new knowledge.
5. Primed Background Knowledge: Related knowledge, placed effectively in sequence, that students must already possess in order to learn new knowledge.

Each *Writing by Design*® lesson begins transfer of information, or review, of knowledge from the previous lesson prior to identifying and modeling new learning objectives. *Writing by Design*® recommended picture books provide explicit models for each genre study. They also serve to frontload knowledge about experiences students may be lacking and present diverse cultural references to aid in connecting students to the learning experience.

6. Judicious Review: Sequence and schedule of opportunities learners have to apply and develop facility with new knowledge. The review must be adequate, distributed, cumulative, and varied (Dempster, 1991, as reported in Kame'enui).

Writing by Design® assessments are an essential element of its instruction. Purposefully designed, direct links exist between clearly identified lesson objectives, student-friendly rubrics, easy-reference genre charts, and formal assessments making it possible for teachers and students to share expectations for learning outcomes. Formative assessments occur through frequent checks for understanding along with self-reviews and shared writing using writing rubrics. Recursive instruction is embedded throughout the curriculum with ample opportunities for students to revise their work based on clear rubric descriptors, peer reviews, and teacher feedback. Summative and cumulative reviews are facilitated by end-of-unit assessments and Grading by Design™ online assessments. Video lesson instruction provides end-of-lesson quizzes, catalysts to mastery learning and precursors to progressing onto subsequent lessons. Students maintain writing folders in which they keep works in progress, where they store specific

writing goals, and where they track their own performance compared to their goals and the state or district standards for their age/grade. (*adapted from Kozlow and Bellamy, 2005*).

Writing by Design® focuses on alignment and variation of procedures over time to promote strategy maintenance and generalization. These structures are taught thoroughly, taking approximately 12 – 15 lessons within each genre to provide massed practice. Scaffolding, however, is gradually reduced as students learn so that practice becomes more distributed. To promote transference and generalization, review is varied as students work on a specific text structure using different topics and combine different text structures into more complex texts. Thorough initial teaching (Englert et al., 1991) greatly enhances transference.

Because **Writing by Design**® uses consistent instructional language year after year, students internalize the language and concepts that enable them to think about their writing. This common language enables writing instruction to smoothly continue from year to year, without time lost for the review of basic concepts and confusion over varied references to a writing concept, e.g., “hook”, “beginning”, “introduction”, “engage the reader”. In the absence **Writing by Design**® implementation, instructional practices are typically linked to teachers’ use of their own terminology, necessitating year-to-year reteaching to address confusion. Grade level “No Excuse Spelling” of most commonly used high-frequency words cycles throughout instruction allowing for accurate distributive practice over time.

D. Calkin’s “Seven Essentials of Writing Instruction” - *Writing by Design*® Alignment

1. Writing needs to be taught just like any other basic skill with explicit instruction and ample opportunity to practice.
 - a) All lessons follow consistent research-based lesson design –
 - i. Stated lesson objective
 - ii. Transfer from prior lesson
 - iii. Teaching and modeling of identified skill
 - iv. Guided individual and whole-group practice
 - v. Opportunities to review, share, and revise work
 - vi. Checks for understanding to determine learning outcomes and facilitate targeted reteaching as necessary
 - b) Comprehensive full-year instruction with explicit teaching and ample practice of each writing genre
 - c) Explicit examples for each genre – picture books, model papers

2. Students deserve to write for real, to write the kinds of texts they see in the world – non-fiction, persuasive articles, letters, stories, and reviews, and to write for an audience, not just the teacher’s red pen.
 - a) Prewriting prompts students to generate ideas and apply concepts to their own lives.
 - b) Peer-revision is guided and practiced throughout the program.
 - c) Grading by Design empowers students to analyze their own writing progression and provides sharing of specific rubric examples.
3. Writers write to put meaning on the page. People will invest themselves in their writing if they write about subjects that are important to them.
 - a) Lessons encourage and teach students how to write and share personal narratives.
 - b) Lessons teach how to determine credible resources to research topics of interest.
 - c) Lessons guide students through differentiation of writing opinions and arguments.
4. Children deserve to be explicitly taught how to write. Instruction matters – and this includes instruction in spelling and conventions, as well as in the qualities and strategies of good writing.
 - a) Grade level “No Excuse Spelling” of most commonly used high-frequency words cycles throughout instruction.
 - b) The process of revision is taught explicit from editing and practiced over and over to identify and incorporate improvements.
 - c) Rubrics explicitly present expectations for editing and revision for each genre and each lesson with Editing and Revision Checklists.
5. Students deserve the instruction necessary for them to cycle through the writing process: rehearsing, drafting, revising, editing, and publishing their work.
 - a) The Writing Process is explicitly taught and provides a foundation of instruction throughout the program.
 - b) Each genre study walks students through outlining, drafting, revising, editing, and publishing.
6. Writers need to read. In order for students to write well, they need opportunities to read and hear texts read, to study what other authors have done and what they, too, can try.
 - a) Easy-to-access recommended picture books provide grade-appropriate models for all writing genres.
 - b) Guided peer-revision allows students to present their work, hear it read, and share ideas for improvement.
7. Students deserve clear goals and frequent feedback. They need to hear ways that their writing is getting better and be guided through next steps.
 - a) Every Writing by Design lesson begins with a clearly stated learning objective and ends with “Checking for Understanding” to determine the learning outcomes.

- b) Grading by Design facilitates immediate student reflection and analysis of achieved rubric skills and empowers teachers to provide immediate feedback without waiting for designated time to “grade” papers.
- c) Reports of student progress are automatically generated for individual students and collective groups, giving teachers the information necessary to target reteaching.
- d) Each video lesson quiz gives feedback about the level of understanding and requires 100% mastery before progression to subsequent lessons.

2. Urgent Need for Writing Instruction

As a precursor to understanding the need for writing instruction, it is important to acknowledge the epidemic of reading failure in the United States as documented in *A Nation at Risk* (1983) and *Preventing Reading Difficulties in Young Children* (National Research Council, 1998). Results from the 1998 National Assessment of Educational Progress (NAEP) in reading demonstrated that 38 percent of fourth-grade students and 26 percent of eighth grade students read at a below basic level (National Center for Education Statistics, 1999). Studies of the National Institute of Child Health and Human Development (NICHD) indicate that 60 percent of children find learning to read a challenging process while 30 percent of these children find learning to read extremely difficult. Risks to literacy development increase for children who are acquiring English, who live in poverty, and those whose parents have low-reading ability. Acknowledging the potentially devastating impact of illiteracy on our nation, the NICHD has proclaimed that “reading failure [reflects] not only an educational program, but a significant public health problem as well.”

“The evidence is clear: writing can be a vehicle for improving reading” (p. 6).
 Graham, S., and Hebert, M. A. (2010). *Writing to read: Evidence for how writing can improve reading*. A Carnegie Corporation Time to Act Report. Washington, DC: Alliance for Excellent Education.

In 2003, The National Commission on Writing in America’s Schools and Colleges deemed writing the “neglected ‘R’” and called for a “writing revolution” that included doubling the amount of time students spend writing. In the years following, extensive reports such as *Reading Next* (Biancarosa & Snow, 2006) and *Writing Next* (Graham & Perin, 2007) supported the idea that writing is a powerful tool for improving reading, thinking, and learning. With most of the country implementing Common Core State Standards, there is a renewed push for more writing, and improved writing. Educators efforts to improve student learning and include more writing within the time limits to daily schedules is supported by Steve Graham and Michael Hebert’s (2010) *Writing to Read*, which gives strong evidence that writing, an essential skill itself, also improves reading comprehension.

For decades researchers have emphasized the strong connection between reading and writing, both in theory and in practice. Multiple studies have demonstrated that writing can improve comprehension. What has been less clear is what particular writing practices

research supports as being effective at improving students' reading. To determine those practices, Graham and Hebert (2010) undertook an in-depth meta-analysis that generated three recommendations:

“Have students write about the texts they read. Writing about a text proved to be better than just reading it, reading and rereading it, reading and studying it, reading and discussing it, and receiving reading instruction”. *Writing by Design*® incorporates this recommendation into its instruction through the use of introductory picture books, model papers, lesson-embedded articles and stories, activities that generate the review of research to support informative, opinion/argument, and summary writing, and shared writing activities. Specifically, students are guided to respond to text through writing personal reactions or analyses/interpretations of the text, writing summaries of a text, taking notes on a text, and creating and/or answering questions about a text in writing. The benefits of these types of writing have proven stronger, particularly for lower-achieving students, when they were tied with explicit instruction on how to write.

With explicit teaching about the writing process, text structures, and paragraph and sentence construction, *Writing by Design*® provides comprehensive support to their second recommendation – “Teach students the writing skills and processes that go into creating texts.” Lessons provide instruction in spelling and sentence construction skills to improve fluency and improve word reading skills.

Their third recommendation – “Increase how much students write. Graham and Hebert meta-analysis confirmed that an increase in how often students write improves students' reading comprehension. While this recommendation is largely determined at the school level, it is directly supported by unique characteristics of *Writing by Design*® - prepared lesson plans and/or video lessons that eliminate the need for lesson preparation and *Grading by Design*™ online assessments that free teachers from extensive time to grade student writing. In addition, individual and collective itemized reports of student progress generated by *Grading by Design*™ create opportunities for teachers to recognize how to target reteaching to student needs to further achieve student proficiency levels.

What may be most important in all of Graham and Hebert's findings is that infrequent writing and lack of explicit writing instruction minimize any sort of effect on reading from the writing practices they recommend. Their report also supports earlier calls for emphasizing writing in the classroom and across content areas. “Writing is a critical skill, important in its own right; given the evidence that consistent writing time and instruction not only improves writing but also reading, gives us an even more compelling case for finding time in our school day for more writing.”

3. Program Rationale

In summary, *Writing by Design*® was conceived as a response to the widely-publicized shortcomings of school writing instruction, and in particular to the inadequate level with which writing instruction was addressed in publishers' materials. This situation has grown to even more urgent proportions with Common Core State Standards, in the face

of the embarrassing shortfall and disappointment of publishers' claims to have materials that support CCSS. A systematic, consistent, robust approach to teaching writing has been desperately needed. By providing comprehensive instruction and valuable assessments in four key writing genres – Narrative, Informative, Opinion/Argument, and Summary, **Writing by Design**® ensures that all students have adequate time and opportunity to learn to write. Its research-based design is grounded in solid principles of explicit, direct writing instruction, including process writing, and the Six Traits Writing Model. Scaffolding for students based on need is provided by its one-of-a-kind online assessments, **Grading by Design**™, and through a variety of structures in **Writing by Design**® lessons. Scaffolding is faded as students gain confidence and proficiency in writing each genre. The program is designed to be integrated into an entire school to provide classroom-to-classroom and year-to-year consistency so that students continue building proficiency. If requested, coaching is provided to ensure that teachers develop the skills to align their instruction to the program model. The data on schools that have implemented the model over time with fidelity is compelling: **Writing by Design**® is the difference-maker for students.