Johnny Can Spell & Write Instructional Strategies Are Research-Based

Johnny Can Spell & Johnny Can Write strategies and activities align with research-based strategies for increasing student achievement as reported in

Classroom Instruction that Works

Research-based Strategies for Increasing Student Achievement by Robert J. Marzano, Debra J. Pickering, and Jane E. Pollock (2001)

This document reviews alignment of JCS/W instructional strategies and activities with the nine broad research-based teaching strategies that have the greatest positive effect on student learning as identified by Robert Marzano, Debra J Pickering, and Jane E. Pollock.

Teachers who implement JCS-W instructional strategies can report that instruction in their classrooms is based upon and aligned with scientific research.

What is Johnny Can Spell / Write?

JCS-W is an instructional approach that provides instructional strategies, management techniques, and curriculum design to integrate phonemic awareness, phonics, handwriting, spelling, vocabulary, and grammar instruction during Word & Sentence Studies.

What is Classroom Instruction that Works?

The authors of *Classroom Instruction that Works* examined decades of research findings to distill the results into nine broad teaching strategies that have positive effects on student learning. In their book, hey provide statistical effect sizes and show how these translate into percentile gains for students. In addition, the authors have included classroom examples and models of these strategies in action.

Do the strategies in Johnny Can Spell / Write align with the research?

Yes, strategies in JCS-W align with the nine broad teaching strategies that have positive effects on student learning. The nine broad teaching strategies are

- 1. Identify similarities and differences
- 2. Summarizing and note taking
- 3. Reinforcing effort and providing recognition
- 4. Homework and practice
- 5. Nonlinguistic representations
- 6. Cooperative learning
- 7. Setting objectives and providing feedback
- 8. Generating and testing hypotheses
- 9. Cues, questions, and advanced organizers

This document presents a very brief summary of each of the nine strategies identified by Marzano, Pickering, and Pollock. The summary is then followed by text examples, training snapshots, and short descriptions of instructional strategies and activities employed in JCS-W instruction which align with these nine broad teaching strategies.

1. Identify similarities and differences

Researchers have found instructional strategies entitled "identifying similarities and differences" to be basic to human thought. (see Gentner & Markman, 1994; Markman & Gentner, 1993a, 1993b; Medin, Goldstone, & Markman, 1995).

Marzano cites the process of identifying similarities and differences as "the core of all learning." Instruction should include both 'teacher-directed' and 'studentdirected' activities. Understanding of content is enhanced with the use of graphic or symbolic form. There are four basic forms: comparing, classifying, creating metaphors, and creating analogies.

--Marzano, Pickering, Pollock, 2001 (pp 14-16)

Identifying similarities and differences is embedded in numerous JCS-W instructional strategies.

Handwriting instruction uses the clock face as a backdrop for the formation of letters. This tool enables students to learn through a thorough examination of the similarities not only of various letters, but also between manuscript and cursive.

Sound Actions incorporates physical activity as students identify sounds that are the same or different during phonemic awareness practice (*LPK*, p 124).

Sound Contrasts (*LPK*, p 126, 129; LP1:1, pp 6-8); **Consonant Riddles** (*LPK* 130); and **I Say, You Say** (*LPK*, p 131) train *the ear to hear* and *the mouth to produce* the unique differences and likenesses in speech sounds.

Comparing/Contrasting Synonyms incorporates graphic organizers to dig deep for the likenesses and the differences found in the meanings of two words which are both classified as synonyms of a third word (*JCWrite Teacher's Guide*, pp 104-105; *LP2:1*, p 71; *LP3:1*, pp 71, 118).

Word Web Center (from Alice Nine's *Words at Work* workshop) provides word sort activity in which paired students use a teacher-selected or student-selected graphic organizer to sort a given set of words base on student-determined criteria.

What does the word ____ mean to ____? (from Alice Nine's *Vocabulary Builders* workshop) is a vocabulary activity that examines the similarities and differences of multiple meanings of a given word.

2. Summarizing and note taking

To summarize effectively, students must have an awareness of the structure of the context of the information in order to delete, substitute, and retain information as they think at a deep level. Summarizing involves deleting trivial material and redundant material, substituting superordinate terms for lists, and producing a topic sentence.

--Marzano, Pickering, Pollock, 2001 (pp 30-32, 43, 45-46)

Development of student thinking and skills supportive of summarizing and note taking are embedded in JCS-W instructional strategies and teacher models.

Creating **learning charts** is major visual technique used in JCS-W as phonograms and spelling rules are applied and as rules and principles of grammar and morphology are practiced. Learning charts use graphic symbols, organizational structures, and abbreviations to record the focus and interrelationships of concepts (see *JCSpell Teacher's Guide*, pp 169-218 for phonics and spelling charting activity).

Summarization and note taking is **modeled daily by the teacher** as he/she writes notes on the board while engaged in instructional dialogues during the "examine a word" part of each lesson (modeled during Alice Nine lesson demonstrations during live in-services or on video clips during training).

During whole group brainstorming activities, students select information and ideas that they regarded as personally significant or important and take notes that they will draw upon as they write compositions (from Alice Nine's *How We Write* workshop).

Sentence diagramming, embedded in most lessons in JCS-W Lesson Planners as well as the JCWrite Teacher's Guide, is a mapping tool used to support sentence analysis for the purpose of identifying main idea and supporting ideas or details and identifying their relationships. In order to map a sentence, students must be able to identify the supportive details (adjectival and adverbial elements) and redundant information (modifiers and appositives) as they identify the main ideas (subject, verb, and complements). Thinking and skill development practiced during sentence mapping supports other applications of summarization and note taking.

3. Reinforcing effort and providing recognition

Teachers need "to make sure that they explicitly teach and exemplify the connection between effort and achievement. Personal recognition based on attainable standards through verbal and concrete symbolic tokens is a powerful strategy to enhance achievement and stimulate motivation."

--Marzano, Pickering, Pollock, 2001 (pp 49-59)

JCSpell Teacher's Guide suggest ways to reinforce effort and to provide recognition that support student success during the lessons.

- Student portfolios provide a place to store a student's best work to be used to self assess future work and growth (p 4)
- Teachers must challenge students to produce their best (p 4)
- Each student's work is treated as an item of value (p 5)
- Promise students success based on their hard work (pp 6-7)
- When we are doing our very best, we are all winners (p 7)
- Be generous and sincere with praise that is deserved (p 7)
- Verbally encourage self-confidence during instructions and during independent practice or assessment activities (p 8)
- Encourage thinking and reward thinking -- not guessing (pp 12-13)
- Teachers who observe process more than product during handwriting skill practice are able to provide recognition to beginning writers even though letters are not formed with precision (p 49)

Moments of celebration occur daily with **teacher prompts during selfchecking activities**. (*JCSpell Teacher's Guide*, p 71)

- "If it looks like the board, raise your pencil..., if not, fix it."
- Students do not mark wrong information with an X. Instead, they "fix" incorrect information with color to support correct thinking and writing. They find the error, fix it, and learn as they join others raising their hands because their work now looks like the board.
- Students count the number they "wrote correctly without help" these are answers that were not rewritten in color--and put the total with a plus sign in margin. An item/information rewritten in color is something a student sees as "in process".

Students enter analyzed words daily into a **Spelling Notebook**--a record of learning (*JCSpell Teacher's Guide*, pp 175-78).

Students maintain a binder with files for their daily work. Teacher easily accesses student work to give **personalized recognition with smiley faces, stickers, and personalized comments on sticky notes**. By viewing student work in a binder, the teacher sees the individual based on all the student's work for a day, for a week rather than viewing the entire class through a collection of papers gathered according to subject or activity (from Alice Nine's *Classroom Management* workshop).

4. Homework and practice

According to research, "homework does produce beneficial results for students in grades as low as 2nd grade" (see Cooper, Lindsay, Nye, & Greathouse, 1998; Good, Grouws, & Ebmeier, 1983; Gorges & Elliott, 1995, Rosenberg, 1989)." Findings show that "parent involvement should be kept to a minimum" (see Roderique, Pulloway, Cumblad, & Epstein, 1994; Balli, 1998; Balli, Demo, & Wedman, 1998; Balli, Wedman, & Demo, 1997; Perkins Y Milgram 1996), and homework "should be structured around content that students have a high degree of familiarity." Assigned homework should be "commented on" (Walberg, 1999).

--Marzano, Pickering, Pollock, 2001 (pp 62-64)

Alice Nine encourages teachers to tell **parents that their role in homework is to facilitate**, that is, to provide a place ("not in front of the TV") and a time ("not on the way to soccer practice or school") (from Alice Nine's workshops).

A free user website, <u>www.phonogrampage.com</u>, is maintained by Alice Nine to provide the tools so that a student can **independently practice** the 70 common phonograms at home.

Homework structure, content, and strategies are outlined explicitly (see *JCSpell Teacher's Guide*, pp 94, 109-112; LP 1:1, 33; LP2:1, p 17; LP3:1, p 17).

Value is placed upon homework when it is checked and it is connected to learning as students share from their homework by reading their sentences or by writing their sentences on paper strips for use during minlessons in writers workshop (from Alice Nine's workshops).

Daily dictation provides a very focused practice which is also an opportunity for students to see benefits of their homework practice. **Drills** with phonograms and words are brief and briskly paced--often timed for speed, occasionally presented in game format with scores recorded to support accuracy. **Word list charts** and **phrase charts** are used to support practice. These practice drills support the development of automatic recognition that is necessary for fluency and comprehension (*JCSpell Teacher's Guide*, pp 69-72, 73, 105-109, from Alice Nine workshops).

Think to Spell[®] and Spell Drill[™] (home version software) support independent student practices of spelling and word analysis at home.

5. Nonlinguistic representations

A nonlinguistic representation is a form of imagery "expressed as mental pictures or even physical sensations, such as smell, taste, touch, kinesthetic association, and sound." Activities include creating graphic representations, making physical models, generating mental pictures, drawing pictures, and engaging in kinesthetic activity." "Generating nonlinguistic representations engages student in elaborative thinking (see Anderson, J.R., 1990)."

--Marzano, Pickering, Pollock, 2001 (pp 73-74)

JCS-W is rich with activities that incorporate nonlinguistic representation. A few examples are listed.

Air-writing, **walking letters** on the clock face, and other **writing without a pencil** strategies incorporate kinesthetic activity and model making in handwriting practices (from Alice Nine's workshops, see *LPK*, p 114).

Kinesthetic activity is engaged during word analysis, **Think to Spell**®, as word syllables are physically punched and individual sounds in a word are paced with hand movements (*JCSpell Teacher's Guide*, pp 124-26). When words are written in their analyzed forms, the **phonograms are coded** with nonlinguistic representations of sound frequency and spelling rules (*JCSpell Teacher's Guide*, pp 98, 102-103).

During **Counting Sounds** in words (*LPK*, p 165) and **Counting Words** in sentences (*LPK*, p 168) students graphically represent language chunks.

Sentence Puppets and **Sentence Formulas** are used to practice the kinds of sentences and their ending punctuation (*JCWrite Teacher's Guide*, pp 17-22, 34; *LP1:1*, p 55; *LP2:1*, pp 30, 70).

Acting out definitions and using hand motions as specialty words are recited incorporates kinesthetic and mental imagining (*LP2*:1, p 29).

Homophone Wall uses logograms and ideograms to represent the meaning of these difficult words prior to sentence writing (from Alice Nine's *Vocabulary Builders* workshop and posted on website).

In the **Poetry Words Center**, students are given 3 minutes to draw with colored pencils a mental image created by reading a poem (from Alice Nine's *Words at Work* workshop).

Sentences are analyzed using **graphic symbols**, e.g., a heart for the verb, a pin on a prepositional phrase.

Word Posters use logograms and ideograms to compare, contrast, and connect words based on meaning and etymology.

6. Cooperative learning

Cooperative groups on ability level should be done sparingly according to the findings of Lou and others (1996). Groups should be kept small. And although cooperative learning should be used consistently and systematically, it should not be overused or misused (Anderson, Reder, Simon, 1997).

--Marzano, Pickering, Pollock, 2001 (pp 73-74)

JCS-W lessons are primarily designed for the whole group during a teacherdirected instructional time. However, it does provide some activities that are cooperative in nature.

Games and activities to practice phonograms are designed primarily for pairs or small groups. To name a few:

- Go Phish for phonograms
- Swat the Flies (phonograms)
- reading the Big Book of Phrases
- Concentration with phonograms or words
- let the fingers do the walking on a Phonogram Pathway
- building a Phonogram Village
- Musical Chairs with phonograms

(See JCSpell Teacher's Guide, pp 78-79; LPK, Activities Section; Phonogram Games (printable booklet on website.)

Vocabulary centers presented in Alice Nine's *Words at Work* workshop are designed for paired cooperative learning, followed by times of whole group share.

7. Setting objectives and providing feedback

Goal setting, a tool to establish the direction for learning, needs to be flexible as it narrows what a student learns. Marzano quotes John Hattie (1992), "The most powerful single modification that enhances achievement is feedback. The simplest prescription for improving education must be 'dollops of feedback' (p. 9)." Immediate, corrective feedback that is specific produces the greatest improvement.

--Marzano, Pickering, Pollock, 2001 (pp 94, 96-98)

JCS-W lessons vibrate with goal setting and feedback.

In live demonstration lessons at in-services and in video clips viewed during training workshops, Alice Nine models informal goal setting during lesson instruction through the use of goal-identifying stems such as

- Yesterday we, today we will
- How will help us?
- We will so we can
- Today, class, you will be able to

Students self-check much of their work immediately upon completion of the task (*JCSpell Teacher's Guide*, pp 69-71, 95, 109). For example,

- The first component of the word analysis process engages students in encoding as they "do" the work. The second component engages students in decoding as they receive feedback and check their work.
- During dictation correction, students self-check their own work against the work as written by teacher, rewriting the correct information with color—an activity rich with immediate, corrective feedback.

The use of **eraserless pencils** requires the teacher to supply specific corrective information to students personally during lesson activities (from Alice Nine's workshops).

Alice Nine recommends that performance assessment be recorded on appropriate student papers by using an "assessment stamp" which lists the language skill or knowledge area such as handwriting, phonics, spelling, writing conventions, grammar, or by using individual stamps for each skill or knowledge area. This is used especially for papers from which a grade will be taken.

Think to Spell[®] software and Spell Drill[™] software is designed to provide students with immediate corrective feedback.

8. Generating and testing hypotheses

Deductive and inductive thinking coupled with explanations and conclusions should guide the use of hypothesis generation and testing in the classroom --Marzano, Pickering, Pollock, 2001 (pp 104-105)

JCS-W lessons provide subtle opportunities to incorporate this strategy.

During the **word analysis** each day, students must consider, apply, and then explain the rules of phonics, spelling, and syllabication as they make decisions about syllable breaks, as they choose a phonogram to write for a given sound, or as they decide where and when to chart their learning.

During the **sentence mapping**, students must consider, apply, and then explain the rules of grammar as they make decisions about word order and word relationships within a phrase, a clause, a sentence. The lines of a sentence diagram often represent these decisions.

Alice Nine believes that teachers should train children to go deep in their thinking. Therefore, she encourages teachers to follow the example of **Socrates--**"ruthlessly question pupils in pursuit of understanding." Sometimes she does this with a hand gesture to her head, as she tells a student, "Unpack your thinking!" Sometimes she does this by simply asking, "Why?" after each answer given until the root answer is discovered (ask 5 why's) (*JCSpell Teacher's Guide*, pp 96-97, 100-101).

9. Cues, questions, and advanced organizers

Cues and questions should focus on what is important and produce deep learning with high-level questions as they help students activate and use prior knowledge. Questioning should incorporate brief wait time between questions and solicited answer and between solicited answer and teacher response. --Marzano, Pickering, Pollock, 2001 (pp 104-105)

JCS-W lessons provide subtle opportunities and some specific activities that incorporate this strategy. Examples can be found in sample dialogues in *JCSpell Teacher's Guide* and by viewing JCSpell in-service lesson demonstrations and training video clips.

Cues:

- When classifying a word as a part of speech, Alice Nine will often silently act out the definitions of the parts of speech, providing nonlinguistic cues to activate student prior knowledge in a new application.
- Alice Nine models the use of voice, body language, facial expressions and directives as cues to support deeper thinking during lesson demos.
- Charts are used as visual cues to activate knowledge about phonograms and spelling rules

Questions:

- The entire process of word analysis is scaffolded by teacher questions (*JCSpell Teacher's Guide*, pp 95-104).
- As words are analyzed during each spelling lesson, teachers should voraciously question students to engage deep thinking.

Wait times:

Alice Nine also models how she uses deliberate wait times (tells students they have 15 seconds to think, then obviously checks her watch). During such a wait time, students are not allowed to talk or call out.

Instructional activities often serve as **advanced graphic organizers**. For example,

- A reading called *The Silent Final* e, designed for readers' theatre, is a great narrative advance organizer for an anchor lesson about silent final e.
- Webbing a word family for the root "trans" is an advanced organizer for lessons about *transitive* and *intransitive* verbs.
- Setting the list of linking verbs to music and singing them is an advanced organizer for a writing lesson on how to eliminate "to be" verbs from a composition.