

# Educator's Voice

NYSUT'S JOURNAL OF BEST PRACTICES IN EDUCATION

VOLUME II, SPRING 2009

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Engaging Special Education  
Students in Higher Levels of Literacy

Teach Kids to Think and  
They'll Want to Learn

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for Struggling Readers

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# Literacy in the Middle Grades

## BUILDING ON THE FOUNDATION

### *In this issue ...*

From preschool and kindergarten through the primary grades, students are taught the foundation skills of reading, writing, speaking, listening and using technology. As students move into the middle grades, the focus changes to an emphasis on vocabulary development and building of comprehension skills — a movement from “learning to read” to “reading to learn.”

This issue of *Educator's Voice* addresses delivering effective instruction for students in grades 4 to 8. This issue focuses on those critically important years of increasing the complexity of the reading material and building the requisite skills so students will flourish in these years and beyond.

The context of literacy instruction includes addressing the diverse needs of students, the appropriate use of remediation, strategies to capture the interest of reluctant readers and writers, and ways to enliven literacy instruction so students remain actively engaged in understanding a variety of genres. These articles help teachers guide students in becoming independent readers, able to comprehend content textual material, and preparing them for the rigors of literacy in high school.



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Dear Colleagues,

I am pleased to share Volume II of *Educator's Voice*, NYSUT's journal of best practices in education.

Building on the foundation of early literacy that was explored in Volume I, this issue will help educators in the intermediate and middle levels guide learners to understand the demands of more intensive and complex reading of fiction, non-fiction and specific subject content reading. The fourth-grade slump is not just a catch phrase. By the fourth grade, students must be agile, independent readers who are able to understand and retain texts and visual content. It is indeed the transitional time of shifting from "learning to read" to "reading to learn."

This issue contains research-based practices developed by NYSUT members who are helping to close the achievement gap in reading comprehension from grades 4 to 8. You will find practices to use in language arts classrooms, with English language learners and special education students. You will learn about professional development activities that lead to teachers fostering discussion that leads to increased comprehension.

Both of NYSUT's national affiliates, the American Federation of Teachers and National Education Association, have identified improving student literacy as an essential key to educational reform in our nation's schools.

Our challenge in New York is to work collaboratively and build systems to share expert knowledge in our schools. This journal provides you with classroom practices educators have found helpful as they seek to help their students understand more of what they read in their daily lives.

Enjoy this issue of *Educator's Voice*. We welcome your comments and ideas for future publications.

Sincerely,



Maria Neira  
Vice President, NYSUT

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# Educator's Voice

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VOLUME II

## Literacy in the Middle Grades

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# Engaging Special Education Students in Higher Levels of Literacy

## SUMMARY

Strategies developed at the University at Albany's Partnership for Literacy are proving effective in engaging special education students at the middle level, who are demonstrating to themselves, their parents, teachers, and others that they are capable of higher levels of thinking.

*Picture this:* A class of middle-level boys in a self-contained special education classroom. All are bright, but they share a common weakness — a lack of confidence in all things academic. Furthermore, this is a class for students with social-emotional problems, some with explosive behaviors. How can you draw them into the world of literacy? What could you do to help them engage in school in a positive and productive way?

This was the challenge for April in her first year as a teacher. She looked at the children before her and knew they demanded some exceptional experiences to light their curiosity about language. So she began with some “playful” activities (e.g., jokes,

hyperbole). In late November, she introduced *The Red Book*, a wordless picture book by Barbara Lehman. After viewing all the illustrations, the students made up a story for each page; an aide recorded the story on chart paper for all to see, with students' initials next to the lines each contributed.

April was surprised at how they described — rather than told — the story. “They started to use their imaginations,” she noted. “This was lots of work for them to do, and it was an activity of complete inference — and they all did it!” She followed up with the non-fiction *Volcanoes, Our Own Burning Questions*, using students' wonderings about volcanoes to drive instruction.

*Janet Angelis is associate director of the Albany Institute for Research in Education at the University at Albany and directs the Partnership for Literacy.*

*Johanna Shogan is an experienced teacher who now serves as a literacy coach through the University at Albany's Partnership for Literacy.*

*Laura Carroll teaches special education in Niskayuna's Van Antwerp Middle School and a member of the Partnership for Literacy.*

*April Ordway teaches special education in Hudson at Montgomery C. Smith Middle School and a member of the Partnership for Literacy.*

*Nicole Hunt is a reading teacher in the Knickerbocker Middle School, Lansingburgh Central School District, and a member of the Partnership for Literacy.*

*Angela Spanakos is a special education teacher at Montgomery C. Smith Middle School in Hudson and a member of the Partnership for Literacy.*

**Janet Angelis, United University Professions**  
**Johanna Shogan, Bethlehem Teachers Association (retired)**  
**Laura Carroll, Niskayuna Teachers Association**  
**April Ordway, Hudson Teachers Association**  
**Nicole Hunt, Lansingburgh Teachers Association**  
**Angela Spanakos, Hudson Teachers Association**

From these initial activities, April began to build a community of writers and thinkers, and she saw not only huge growth in student literacy but noted that they were finding their voices and gaining confidence through their writing: Pedro was showing off his work to the secretaries in the main office, to the guidance counselor, and to the school psychologist and asking if he could write a story. BJ recognized onomatopoeia on a student's shirt in the cafeteria and with Marcus<sup>i</sup> searched for more words to contribute to the list the class was generating. By spring students were finding oxymorons and bringing them in for the rest of the class to enjoy. If students had free time, they were now returning to stories they had written previously and adding to them. All demonstrated a willingness to work — and the stamina needed to sustain writing.<sup>ii</sup>

April's voice became stronger too. She shared her students' successes with colleagues and recognized that she could do this work and that she had a cadre of students willing to join the initiatives she presented. Her reward was that each student grew in his own

language proficiency and had contributed to the learning of every other student in that class. What more powerful accomplishment could there be for a teacher, especially a new teacher?

During that year, April was working with Johanna Shogan through the University at Albany's Partnership for Literacy (*see sidebar*). Johanna is a literacy facilitator, or coach, who works with teachers across grades, subject areas, and specialties on adopting and adapting instructional approaches that increase students' literacy learning and performance. Recently, she and her fellow coaches have been working specifically with special education teachers in several middle-level schools, including those of the authors of this article. Although the strategies described have been shown to be effective with all students, we draw our examples from special education, where students often face greater challenges than their peers and have further to go to demonstrate their literacy proficiency. Furthermore, since the strategies require and foster more abstract thinking, these special education students are demonstrating

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## METHODOLOGY

### Partnership for Literacy

The Partnership for Literacy is a research-based program that builds on and strengthens teacher and school efforts to improve student literacy. University-based literacy coaches work with and alongside teachers, introducing a variety of effective practices and ensuring that participants understand both why and how the strategies work to support student learning.

Based on a blend of state-of-the-art research and practice, the teaching strategies the partnership uses promote critical thinking, substantive discussion, and improved achievement in reading and writing. Another critical element of the partnership is support for groups of teachers to learn with and from each other. The partnership was developed by the Center on English Learning & Achievement at the University at Albany under the leadership of Judith A. Langer, distinguished SUNY professor and internationally recognized literacy expert. It works in every type of school, across all grades, and in all content and specialty areas.

We need to teach students how to learn and then support them as they take on any complex task, gradually removing the supports as they are able to complete them independently.

— to themselves, parents, teaching assistants, teachers, and administrators — that if given the opportunity they, too, are capable of higher levels of thinking and can use the concrete to support the abstract.

As in April’s class, these students are eagerly *asking* to write more. Every student is actively taking part in the class discussion. Students are also gaining confidence and voice, enabling them to actively participate in their mainstream classrooms, according to their general education teachers. They are voicing thoughts and demonstrating higher-level thinking that teachers and administrators had not seen before. And they are demonstrating success in all areas of the state’s English language arts standards, as evidenced by their improved performance on state ELA assessments.

## **Integrating Discussion, Reading, and Writing**

Partnership facilitators start their work with all teachers, whether general or special educators, by encouraging them to open their classrooms to authentic discussion — and supporting them to physically set up the space to be conducive to discussion; to establish rules and guidelines that ensure meaningful and productive student interactions; to ask questions that students find worth discussing about issues that matter to them and

to the subject being studied and to the material they are using; to use those questions to move students to higher levels of thinking (e.g., analysis, synthesis); and to tie all of this work to state standards.

This work with teachers is grounded in research about the connections between discussion and reading and writing performance<sup>iii</sup> and includes findings about:

**How people learn best.**<sup>iv</sup> Humans are social beings who benefit from interaction, discussion, and the perspectives of others.

**How our minds work when we process information.**<sup>v</sup> We process literary and informational texts differently — with the former opening up “horizons of possibility” and the latter closing in on points of information. We take various “stances” in relation to the text depending on our current levels of understanding, and a teacher’s questions can guide students to more analytical stances.

**The importance of instructional scaffolds to support student learning and skill development.**<sup>vi</sup> We need to teach students how to learn and then support them as they take on any complex task, gradually removing the supports as they are able to complete them independently.



### **How writing shapes thinking.<sup>vii</sup>**

Writing not only facilitates rational thought but provides a record upon which to reflect and review thinking.

### **How offering a connected and coherent curriculum helps students learn and remember.<sup>viii</sup>**

These findings have been validated by many researchers over the past several decades.<sup>ix</sup> Included in those research studies is an experimental study conducted by Applebee, Langer and colleagues that tested not only particular instructional strategies, some of which are discussed in detail below, but also tested their approach to working with teachers to put the more effective strategies in place. This process/approach has come to be called the Partnership for Literacy. Results show a positive change in teacher practice and an improvement in student writing, particularly for urban students who are generally underperforming.<sup>x</sup>

In the sections that follow we offer a glimpse of how special education teachers use some of these strategies to motivate and support student thinking and use discussion to help their special education students develop stronger reading, writing, and oral language skills.

## **Instructional Scaffolds for Writing, Discussion, and Reading**

Instructional supports — or scaffolds<sup>vi</sup> — are important in helping all students build strong skills that they internalize and can independently draw on to acquire additional skills and knowledge. This is especially true for students with special learning needs. Angela Spanakos uses a writing scaffold to help take the initial fear out of writing for her special education fifth-graders.

### **Scaffolding Writing of Paragraphs and Poetry**

When first asked to jot down words they associated with writing, Angela's students offered: "boring!" ... "oh no!" ... "a drag!" ... "a hassle!" To help make writing less intimidating, Angela uses writing scaffolds. These supports provide students with guidance when writing so they feel confident enough to put words to paper. The scaffolds are frames that set the stage for what students want to put into their paragraphs. They are the "bones" of the paragraph; students add "meat" by adding their own ideas. Writing scaffolds build students' confidence and give them a feeling of "This isn't so bad; I can do this." When students see their final product, it opens the door for more opportunities in writing, which helps build stamina.<sup>ii</sup>

These supports provide students with guidance when writing so they feel confident enough to put words to paper.

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Like construction scaffolding, instructional scaffolding is meant to come down as students gain the skills to complete the task on their own.

## **Lifting students over the hump.**

To get started, Angela brainstorms ideas with students and writes their thoughts on chart paper. These ideas stay up throughout the writing activity so students have a visual to help with their thinking<sup>vii</sup> and spelling. Angela passes out the writing scaffold on paper. At first glance, it looks like a *cloze* activity, with hints written in the blanks. These hints are questions for students to answer as they complete the writing activity; they may be as simple as “What do alligators eat?” Then the class reviews the “bones” — or frame — of the paragraph by reading it aloud. Students next complete the frame by copying it over and putting their own ideas in the holes. The framed paragraph shows students how sentences come together; it helps them see the flow and organization of a paragraph. Like construction scaffolding, instructional scaffolding is meant to come down as students gain the skills to complete the task on their own.<sup>vi</sup>

For example, in her fifth-grade class, Angela used a framed paragraph to help students compare alligators and crocodiles after they had read *Snap! A Book about Crocodiles and Alligators*. Students were engaged in the book, which offers a wealth of information and photographs of alligators and crocodiles. Following the reading, the class developed a Venn diagram to organize the information. Students actively shared facts they had just read

about as Angela recorded them on the chart. When Angela announced the writing task, one of her students who despised writing headed for the door. The words “type on the computer” caught his ear, though, and he stayed long enough to hear the activity. For this particular student, Angela had set up the writing scaffold on the computer, which he enjoyed using. Familiar with the framed paragraph from a previous activity, he felt confident enough to attempt the writing. The scaffold helped him organize his many thoughts and gave him a springboard from which to write. He was able to complete the writing task without hesitation and did so with a smile.

**Poetry.** Angela found that writing scaffolds also work with poetry. After reading the poem “Feelings Alive” by Carol Peck, she put the seven feelings described in the poem on separate sheets of paper and taped them around the room. Students were asked to list concrete objects associated with the feelings on each paper, for example, a fire for “anger” or a puppy playing for “happiness.” As a class, students developed a variety of creative ideas and then added to the lists throughout the period as new ideas popped into their heads. Angela provided students a copy of the poem with Peck’s concrete objects omitted. Students copied the poem into their notebooks, supplying their choice of concrete objects from the lists generated

by the class. Angela was amazed to see students so eager to write their own poems. Again, students who had strongly resisted writing poetry found this task simple, and the final product made them feel successful. More importantly, the students became able to do the work on their own: As students grew more confident in their writing, Angela was able to pull the scaffolds away.

### **Scaffolding Discussion**

Laura Carroll also uses chart paper to capture students' ideas for future reference. In addition to writing, she uses these and other visual cues to support discussion.

**Visual and tactile cues to maintain focus.** In Laura's special education class, visual cues set the stage for discussion and remind students to support their ideas and transfer their developing skills to other situations. Visuals include print as well as everyday objects that she has infused with symbolic meaning. For example, she posts student-generated rules and reminders for meaningful discussion. Some key concepts for a meaningful discussion are to agree and disagree respectfully, focus, clarify, think, tell why, respond, listen, question, connect, explain, predict, and give feedback. When students demonstrate an awareness of the key factors that create a firm foundation for an argument, they receive the "rock award." Her

seventh-graders strive to receive the rock rather than remain quicksand, which has no solid foundation at all, for the remainder of the class period. Many students who receive a rock award also get published to the "Gem of the Day" bulletin board, a place where students' words of wisdom are displayed for all to see; both teacher and students use these gems for reference in discussions and writing. A backpack hangs in the classroom as a reminder to students to remember to bring the skills they learn to all of their classes. Another favorite visual is the pair of sneakers hanging from the ceiling. They remind students to step into someone else's shoes and see life from different perspectives.<sup>iv</sup>

**Questions to deepen thinking and learning.** Laura also employs a tactile learning tool you may remember from childhood. Various called a "scrunchie," "cootie catcher," or even "fortune teller," this origami toy is multipurpose, fun, innovative, and in Laura's class vital to helping students move from concrete to abstract thinking. Students can hold it, manipulate it, and use it as a guide to discuss ideas about text or to inform their writing. The questions support different reading stances<sup>v</sup> or levels of understanding as students process text — from initially stepping into a new text world (stance one) to being within it (stance two) to stepping

*continued on following page*

Another favorite visual is the pair of sneakers hanging from the ceiling. They remind students to step into someone else's shoes and see life from different perspectives.

The framework allows students to move from one stance to another and back again as they attempt to make meaning from the text.

back to relate what they are learning to something else they already know (stance three) to tapping higher levels of thinking like synthesis or analysis (stance four); Laura uses the stances as a framework to guide discussions with her students. They are open-ended questions about a literary text, prepared prior to a discussion, as a tool for teachers and students. The first stance includes the “wonder” question, “What are you wondering about?” Students respond to this question like no other. They tell her what is important to them, what ideas they have, and what they are thinking about the text; and they have a chance to clarify any misunderstandings about characters, events, vocabulary, and ideas.

Second-stance questions help students develop ideas, make connections to their own lives, and think deeper about the characters and important parts of the text. The third stance asks students to step out of the text and think differently about something in their lives or the world they live in — step into someone else’s shoes, reflect on how the text has changed their views about their lives and the lives around them. The fourth stance asks students to analyze the text itself. For example, she might ask, “Why did the author write this book?” or “How does this book compare to others you have read?”

The framework allows students to move from one stance to another and back again as they attempt to make meaning from the text. Sometimes the class will lead the discussion by choosing questions from the “cootie catcher.” They choose questions from each stance, question each other, and choose who asks the next question. Laura acts as the facilitator of these discussions, using uptake<sup>xi</sup> to build on student responses to ensure a full exploration of the text, as needed, but letting students lead the discussion in a way that is meaningful to them. And she helps them record their responses. The cootie catcher acts as a springboard for meaningful discussion and develops positive habits of mind when students interact with texts. It is also easily adapted for use at home with parents.

## **Scaffolding Reading by Teaching Inference**

Nicole Hunt, too, uses scaffolds to support close reading, and through discussion helps students learn to identify what an author says without saying it explicitly — learning to recognize inference.

**Finding inference through “wonder questions.”** Like April, Nicole was a first-year teacher who wanted to use classroom discussion to promote literacy engagement, but she found that her students were not fully capable of conducting a focused discussion.

Even more, she feared her students would not be able to meet the goal to master inference. To teach the students how to “read between the lines,” she had to start with the perfect text. She chose a passage from the novel *First Part Last* by Angela Johnson, which offers many opportunities to practice identifying inference. This choice did not come without risk, though: The topic of teen pregnancy poses an issue of appropriateness for sixth-graders, but her choice was based on its potential for provoking conversation.

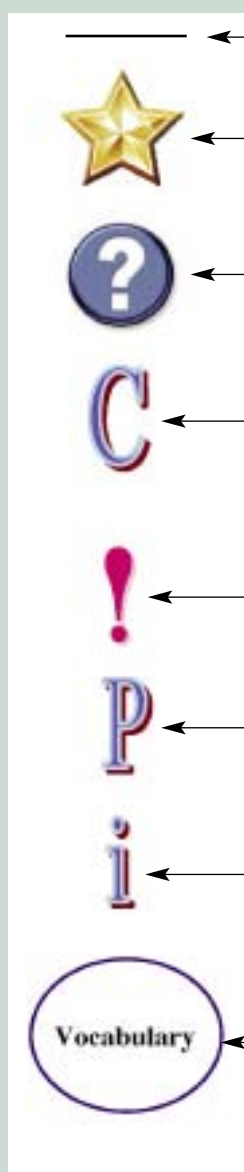
Nicole had already introduced her students to Reader’s Marks (*see sidebar*) to track their thinking while reading. Students found these helpful; as one student said, they are a “map that shows the way to think.” For this lesson she introduced a new mark for making an inference: a simple “i” with a circle around it. Discussing first why a reader might need to make an inference (because authors often leave information out on purpose), Nicole discussed how she might figure out what was not written by gathering written clues combined with her own background information to develop an understanding of the “unsaid.” She modeled how a portion of the text made her wonder, then she and her students offered possible answers to her wondering. Next, pairs of students tried to come up with their own wonder questions as they read, with

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## METHODOLOGY

### Reader’s Marks

**Good readers actively think while they read.** With the right equipment, a pencil or pen, you can master all you read. By making your thoughts visible you can: learn the basic facts, think beyond the passage, spot essential vocabulary, ask important questions, remember information, connect ideas, and gain confidence. You will see your ideas at work!



— ← **Underline** the parts that you think are important.  
Details, dates, names, facts and definitions.

★ ← Put a **star** in the margin of an unusual idea, a new thought, something you want to go back and take a second look at, or an interesting quote or piece of information.

❓ ← Put a **question mark** down when you don’t understand. Better yet, write your own question in the margin.

C ← Put a **C** in the margin where you have a personal connection. It may relate to your own life, remind you of another idea, something else you know, etc. **WRITE THAT IDEA DOWN.** Or, it just might be a comment you would like to make.

! ← **Surprise!**

P ← Make a **prediction!**

i ← Put an **i** where you think you have found an **inference** to something not being said directly.

Vocabulary ← **Circle** a new new vocabulary word. Guess its meaning, or look it up in the dictionary.

*Thanks to our teacher-partners for developing these marks.*

It is often very difficult to motivate a reluctant learner, especially those who have had so many negative school experiences. It's so important to make learning fun for these children so they do not feel threatened.

possible reasons or answers. This activity helped students develop an understanding of both the skill of inferring and of the text itself. It pushed her students to dig deeper into the text — a new phenomenon for them. She followed this with a whole-group, student-led discussion; her occasional probing served as enough of a scaffold for the discussion about the inferences in the text. One of the most interesting things she noticed was that student-led discussion created enthusiasm for the literature. They were now begging to read the rest of the text.

### **Student-student discussion.**

Despite the accomplishments of this class period, Nicole was feeling “uncomfortable” about releasing control of the discussion so soon. She found it awkward to spend the majority of the class silently listening to a conversation her students were having. Yet with just a few interjections to guide the conversation in the right direction, she had helped her students develop a deeper understanding of the skill of inferring, the meaning of the text,<sup>v</sup> and the strategy of using Reader’s Marks (see previous page). That was a lot to accomplish in 40 minutes. Thus she concluded that “this community I had created in my classroom in which my students were fully engaged and learning was something I would stick with in the long run.”

### **Tapping into student interests and having fun with language.**

When April decided that playfulness might engage her reluctant learners, she began by tapping into their love of jokes. They were always telling jokes, so she introduced *Lies and Other Tall Tales* by Zora Neale Hurston to teach hyperbole. She read the book aloud, and they discussed some of the tall tales from it. The students brainstormed their own hyperboles, with many students referring back to jokes they commonly tell, changing them to fit within the parameters of no insults, no names, and always school-appropriate. In the end, the students created an illustrated class book of their own hyperboles. Some examples: “I knew a girl who was so thin she used a Froot Loop as a hula hoop.” “I knew a man who was so stupid, that while working in an M & M factory, he was throwing out all the Ws!”

Over the year, Fridays became “fun days” for those who had worked hard all week and earned it. One Friday the class did a project in which they hatched “test tube aliens.” Those aliens sparked a class writing assignment for boys who were struggling writers and rarely wrote more than a couple of sentences. The aliens became quite the motivator! They became the subject of a story each boy eventually typed and illustrated.

They all worked hard writing rough drafts, revising and editing their stories. At the final copy stage, April brought in laptops and each typed out his story. She never thought she would get this group of students to take a story through the writing process.

In June, April said, “I learned so much from these students, but most of all I learned that it is so important to know who your students are, and what motivates them.” She learned it is possible to motivate a reluctant learner, especially those who have had so many negative school experiences. It’s so important to make learning fun for these children so they do not feel threatened. When my students were having fun with language they were learning and they were finally successful—and they knew it!”

Like their general education colleagues, in agreeing to try new instructional strategies that require students to attain higher levels of thinking through student-generated discussion, these special education teachers had to change their teaching practice to help their students master literacy. They learned to help their students simultaneously work with concrete and abstract thinking, using rich oral language experiences to stretch the concrete to the abstract.

The strategies mentioned in this article are examples of scaffolds to support such thinking and learning. And, perhaps even more than mainstream teachers, they had to believe that their students could do it. All four were willing to work with a Partnership for Literacy coach and experiment with new strategies to help their students discover their voices, their own pursuits, and, in so doing, their own success in becoming more literate. The teachers, too, became stronger in their practice, more reflective, and more poised in their delivery. Students discovered they could write poetry, make inferences, take responsibility for their own learning, and actually enjoy reading and writing. What could be more important than building such a foundation for their students?

# Engaging Special Education Students in Higher Levels of Literacy

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## ENDNOTES

- <sup>i</sup> Students' names are pseudonyms.
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# Teach Kids to Think and They'll Want to Learn

## SUMMARY

When students are given the tools for thinking, reflecting, and extending their comprehension from literal to deeper levels of thinking, a passion to learn is established.

*A teacher is* balancing the art of planning lessons to teach district grade-level expectations based on New York state learning standards while addressing the individual needs of students. This teacher:

knows the lessons in the classroom today must shape students to be independent, creative, and critical thinkers for the future;

immerses the students in language-rich experiences through well-planned lessons and exposure to a variety of genres across all content areas;

cultivates students' thinking that reaches various levels;

diligently uses questioning techniques that can guide students to deepen their levels of understanding;

feels the rewarding responsibility to foster love of learning in all students.

This love of learning that is nurtured will empower each student to successfully enter the workplace of the 21st century. This teacher is any one of us.

This teacher is you.

Most of us do not think about how we think. We just do it. Yet there is much to consider when we decide to teach our students how to think. Creative thinking, critical thinking, and metacognitive thinking are three processes that interact in a dynamic way to advance students' comprehension, performance, and achievement. The interaction is dynamic because creative thinking allows thinkers to generate ideas. Critical thinking allows thinkers to evaluate the value of the ideas, and metacognitive thinking allows thinkers to reflect on their thoughts about those ideas. Through metacognition, thinkers begin to take control of their learning.

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For example, after reading a paragraph in a text, Victoria, a fifth-grade student, questions herself about the concepts discussed in the passage. She knows her goal is to understand the text. Self-questioning is a common metacognitive comprehension strategy that allows a reader to monitor his or her comprehension. Victoria finds she is unable to answer her own questions or that she does not understand the ideas in the text. She must determine what else she could do in order to meet her goal of understanding the text. She decides to go back into the text and reread sections of the material. After rereading, she can now answer her questions. Victoria decides she now understands the material. The metacognitive strategy of self-questioning ensures that the goal of comprehension is met.

Bloom's Taxonomy, Reciprocal Teaching, and Question-Answer Relationships are three strategies teachers can apply to guide students to take control of their own learning. Students begin to set their own purpose for their learning as they monitor their comprehension. An energy and desire to learn are established because students have been given the

tools for thinking, reflecting, and extending their comprehension from literal to deeper levels of thinking.

Reading is thinking that is cued by written language. We cannot think for our students; we cannot even show them the complex operations that make up the reading process. However, we can teach in a way that gives students a good idea of what effective readers do as we support them using these strategies daily (Fountas and Pinnell 2000).

The National Assessment of Educational Progress (NAEP 2003) is the only federally funded large-scale testing program in the United States. Reciprocal Teaching, Question-Answer Relationships (QARs), and Bloom's Taxonomy align perfectly within the NAEP framework of questions that require students to integrate information from a variety of sources. Students are increasingly expected to be comfortable independently reading a range of genres — fiction, nonfiction, procedural text — and evaluating texts they read. Fewer than one-third of the questions on state tests will require students to simply recall information (NAEP 2004).

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As he became more independent, Nick said he felt like he knew a secret and he now knows how to find the answers.

In addition, with mandated federal testing in grades 3-8, the thinking structures outlined in this article not only align with state and district standards, they can provide a solid sense of accountability as educators strive to prepare students not just to do well on tests, but to prepare them for the future.

## Reciprocal Teaching

Reciprocal Teaching is a technique built on four strategies that careful readers use to comprehend text: predicting, questioning, clarifying, and summarizing (Palincsar & Brown, 1984). The teacher models each strategy by thinking aloud as he or she demonstrates the use of strategies. The teacher talks through his or her thoughts before, during, and after reading. Students then apply as the teacher facilitates group discussions. Over time the teacher gradually releases responsibility to the students for eventual independent application. The students take turns “being the teacher” and thinking aloud. They describe their thinking, using the principles of the strategy, as they monitor their comprehension (Oczkus 2003).

## Question-Answer Relationship

QAR was developed by Taffy Rafael (1986) as a tool for clarifying how students can approach the task of reading texts as they ask and answer questions to deepen comprehension. The QAR strategy is one of the best

ways to help readers understand that reading requires thinking (Hollas 2008). It teaches readers where to seek answers to questions when they are given multiple-choice and open-ended questions. It helps students realize the need to consider information from the text and information from their schema (background knowledge). QARs provide a language that teachers and students can use to discuss, dissect, and analyze vague ideas in a reader's mind. This language is internalized so students can become independent as they comprehend text beyond the literal level.

A colleague and special education teacher, Laura Castagna, has found success implementing QARs within a small group of fourth-grade students. She noticed one student in particular. Before QAR was introduced, Nick had great difficulty comprehending text at the literal level. Over a few weeks, he grasped the different types of questions. As he became more independent, Nick said he felt like he knew a secret and he now knows how to find the answers. The essential idea of QAR is that reading involves a reader making connections between his or her background knowledge, the ideas in the text, and the author's purpose for writing the text. Developer Rafael named four categories of types of questions (Raphael, Highfield & Au 2006):

## METHODOLOGY

Table 1:

Bloom's Original Taxonomy	The Revised Taxonomy
1. Knowledge	Remember
2. Comprehension	Understand
3. Application	Apply
4. Analysis	Analyze
5. Synthesis	Evaluate
6. Evaluation	Create

**Right There:** Text Explicit — the answer is in one place in the text.

**Think and Search:** Text Implicit — The answer is several places in the text.

**Author and Me:** The reader needs to think about what he or she already knows and synthesize that information with information in the text to make a basic inference.

**On My Own:** The answer is not in the text. The reader must apply a strong sense of background knowledge or research other texts to respond.

### The Revised Bloom's Taxonomy

Benjamin Bloom created the Taxonomy of Educational Objectives in the 1950s as a way of delineating the different levels of thinking and student outcomes (Bloom 1956). In the 1990s, Lorin Anderson, a former student of Bloom's, led a team of cognitive psychologists in revising the taxonomy with the primary focus of making it more useful for teachers (Anderson & Krathwohl 2001). Table 1 outlines the differences between the original and the revised taxonomy. The main difference is in the language. The revised taxonomy states each category as a verb to encourage active, higher-level thinking. Note also that the category of *synthesis* is renamed *create* and has changed positions in the hierarchy.

### Impact on Teaching

There are always opportunities to incorporate higher-level thinking skills within all literacy lessons — using meaningful texts — across the curriculum. Table 2 lists thinking strategies each technique can provide before, during, and after reading. I began to track the progress of all of my students within a special education resource room and an integrated classroom. All students were taught within small-group strategy instruction sessions. As I scaffolded instruction within a guided reading structure, I monitored the students' progress along with their ability to transfer the skills independently. The following evidence is based on a classroom action research project that I implemented over the course of last school year. I taught the students in a resource room setting or small-group

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Source: Lorin W. Anderson and David R. Krathwohl, *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives* (Boston: Allyn and Bacon, 2001).

# Teach Kids to Think and They'll Want to Learn

instruction within an integrated setting. The students were fourth- and fifth-graders with learning disabilities.

## Research in Action

My action research sought to describe how reading comprehension and higher-level thinking skills can be effectively promoted with struggling fourth- and fifth-grade students with learning disabilities. A second goal was to ascertain how best to proceed

with the planning and implementing of effective literacy instruction to guide students with learning disabilities to actively gain meaning from text.

## Method:

This classroom research process was based on the principle of natural inquiry. I used a qualitative approach to deepen my level of awareness for the learning process within my resource room small-group instruction.

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Table 2:

	<b>Bloom's Taxonomy</b>	<b>QAR strategies</b>	<b>Reciprocal Teaching strategies</b>
Before Reading	Remember Explain Recall Predict Evaluate Analyze	<b>Author and Me</b> Predict Visualize Make Inferences and Connections <b>On My Own</b> Connecting to topic Activating Background Knowledge	Predict Clarify Question
During Reading	Recall Locate Explain Evaluate Justify Analyze Hypothesize Synthesize Interpret	<b>Author and Me</b> <b>Think and Search</b> Determine Importance Summarize Compare and Contrast Clarify <b>Right There</b> Scan and Skim Locate Information	Predict Clarify Question Summarize
After Reading	Infer Compare Contrast Classify Paraphrase Justify Evaluate Synthesize	<b>Author and Me</b> <b>On My Own</b> <b>Think and Search</b> <b>Right There</b>	Summarize Clarify Question Predict-beyond the text

When exposed to direct instruction that incorporates the QAR model, Reciprocal Teaching, and higher-level thinking according to Bloom's Taxonomy, students with learning disabilities can develop greater metacognition about their reading process in order to be independent active readers.

I documented student progress through the use of performance assessment and teacher observation. I evaluated students' abilities to remember, retrieve, summarize, paraphrase, apply, analyze, evaluate, create, and generate new ideas. I surveyed the students' metacognition through the use of questionnaires and anecdotal notes. Quantitatively speaking, I counted and recorded the accuracy of multiple-choice questions.

**Claims Formulated from Research Findings:**

I used a qualitative approach to formulate the following beliefs:

The teacher must provide explicit instruction to increase the likelihood of students applying higher-level thinking strategies independently.

Reciprocal Teaching provides a language for readers to actively connect with text.

QAR instruction helps students with disabilities realize the need to consider both information in the text and information from their schema.

When exposed to direct instruction that incorporates the QAR model, Reciprocal Teaching, and higher-level thinking according to Bloom's Taxonomy, students with learning disabilities can develop greater metacognition about their reading process in order to be independent active readers.

**Impact on Student Learning:**

Introducing reciprocal teaching with scripted "teacher cards" encouraged the students to intermittently make predictions, ask questions, clarify, and summarize. These cards provided a scaffold to guide the organization of each reader's thinking patterns. The students began to incorporate the language of reciprocal teaching in their oral responses to indicate that they were beginning to internalize the process for independent thinking. For instance, students began their responses with "I predict" or "I wonder..." I observed the ease with which students said, "I don't get it. I should just reread to clarify." I found that using reciprocal teaching alone served to guide readers to make basic predictions and extend their thinking to paraphrase, recall, and activate their background knowledge.

Weaving in higher-level questions brought students to a deeper level of understanding. For instance, I used the principles of reciprocal teaching during a read aloud of *Grandfather Twilight* (Berger 1984). This story provided many opportunities to apply the principles of reciprocal teaching. Students actively made predictions, asked questions, summarized, and we reread to clarify when they needed. They used the familiar language to name their thinking. However, they stayed within the literal level of com-

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# Teach Kids to Think and They'll Want to Learn

Students with learning disabilities are capable of reaching higher levels of thinking.

prehension. All of the students were actively engaged in gaining meaning from text. It was necessary to incorporate QAR and Bloom's Taxonomy to encourage students to reach higher levels of thinking, such as making inferences. The following is a sample of the questioning that guided them to understand the text at deeper levels:

I asked: *Where did Grandfather Twilight live?*

Students responded: *In the trees.*

I asked: How do you know this?

Students responded: *It was in the story we just read.* The students were able to locate the exact sentence in the text.

I repeated: *Yes, the answer was right there in the... students chimed in ... text.*

I asked: *What time of day was it in the story?*

Students: *Twilight*

I asked: *How do you know?*

Students: *It's right there in the text.*

Next I added: *In the story, what time of day is twilight?*

Students responded: *As it gets dark and the sun is going down.*

I asked: *How did you know the answer to that question?*

The students were quiet.

I asked: *Can you find the answer*

*right there in the book?*

The students said: *not really.*

I added: *Then you must have used your ... my voice trailed off ... waiting ... and then two students responded with excitement — schema!* (background knowledge)

Anchor charts displayed in my classroom guide memory and application of each strategy use. Over time, students were able to write down meaningful questions while applying reciprocal teaching, code the questions based on the QAR model, then identify the level of Bloom's Taxonomy to which their questions belonged. For instance, while reading *Ruby Holler* (Creech 2002) Michael wrote on a Post-it, *Why did Dallas call the bird a 'magical silver bird'?* He thought of the answer and coded it "Author and Me (AM)." He said, *Dallas likes to be imaginative because he is trying to feel happy.* Michael explained that he coded his thinking AM *because you have to use some clues from the text ... but you also have to think about what you think.* The group agreed that Michael achieved thinking at levels 2 (understand), 4 (analyze), and 5 (evaluate) of Bloom's Taxonomy. The best part is that Michael and his peers have shown signs of metacognitive, creative, and critical thinking skills. They are taking control of their learning. They took this control with them right back into their classroom.



My colleague Mary Laurine, a general education teacher, noticed the students were able to explain the process of applying QARs to a reading in the social studies textbook. Each student was able to transfer his or her knowledge to the general education setting. Mary noticed that the general education students benefited in ways similar to the students with learning disabilities. The QAR provided them with the language they needed to explain their thinking. In addition, the students with learning disabilities were provided with a structure to organize their thinking.

### Implications for Future Teaching

Reciprocal Teaching, Question-Answer Relationships, and Bloom's Taxonomy can guide educators to make effective decisions about how to teach students how to think across genres and content areas. Teachers should discuss with parents the language of literacy and higher level thinking that their children are learning in order to further support transfer and independent use of higher level thinking. The results of applying these strategies have proven to me what I already knew — students with learning disabilities are capable of reaching higher levels of thinking. Through direct instruction that gradually releases responsibility to guide each

student, teachers can realize they are creating learning experiences that teach beyond the moment. They are teaching each student to be an independent, active reader — a reader who can think at higher levels.

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# Two Important Strategies for Struggling Readers

## SUMMARY

Even students who meet standards in the early grades are likely to struggle if they don't receive instruction in the more sophisticated literacy demands of middle-level content areas. This article shares recommendations for two strategies that its authors say should be included in any comprehensive literacy program at the middle level: differentiated support for literacy across the curriculum, and additional targeted instruction for those who struggle with reading and writing.

## *Background*

Much qualitative research has described the literacy strategies older youth develop to negotiate situations that matter to them, including relationships with peers outside of school. Even those who struggle with academics can demonstrate sophisticated, though non-academic, literacy strategies while graffiti-writing (Moje, 2000), instant messaging (Lewis & Fabos, 2005), and participating on a MySpace page (Malavasic, 2008). When teachers appreciate and make connections to such out-of-school capabilities, youth's motivation to participate in academic literacy instruction can benefit.

Judith Langer and colleagues at the Center on English Learning and Achievement identified the shared features of dozens of effective secondary school English language arts classrooms. Such classrooms include varied forms of explicit literacy instruction, rich curriculum not limited to test preparation, coherent learning tasks that invite youth to make connections to what has been learned outside of school, overt instruction in strategies for thinking and doing, enactment of generative conceptions of learning, and complex learning involving social engagements (Langer, 2002).

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Langer’s findings mirror school-wide recommendations that can be found in several recently published reviews of adolescent literacy research. The methods that we recommend in the following sections come from these reviews or other peer-reviewed research articles. All have been shown to foster measurable differences in literacy development in youth who struggle with literacy. Supporting studies or other sources are listed in the end-of-text References, and several research reviews are listed at the end of this article. These may be useful tools for school-wide literacy planning teams who want to delve more deeply into the research.

### **Strategies for support**

Like Ms. Simpson (*see Methodology at right*), teachers in all subject-specific classes can ask students to read and write frequently. They can teach mini-lessons to aid such work, meant to help students gain understandings specified in the subject-specific New York state learning standards. Teachers can model reading and writing strategies and invite students to mimic their efforts as they coach. Students can eventually be asked to use such strategies independently, writing on Post-its or in learning logs

## **METHODOLOGY**

### **Strategies for Supporting Those Who Struggle With Reading and Writing Across the Curriculum**

Students in Ms. Simpson’s seventh-grade mathematics class were investigating the uses and calculation of slope. Students worked in assigned heterogeneous pairs to solve the problems posed in the unit launch, and to explain their varying solutions to the class; pairs were assigned according to reading scores, with one more and one less able reader in each dyad. Ms. Simpson demonstrated to the class how to use the boldface words and headings to determine what was important in each section of the textbook’s explanation, inviting students to help her explain key ideas in the first section, then asking the pairs to note important ideas in subsequent sections on Post-it notes for her collection and review. She also modeled the plotting of slope according to a simple equation and asked her student pairs to try several more such problems. She then directed students to complete a quick write, explaining what they’d learned in class.

Disappointed that students did not use precise technical vocabulary in their written explanations, Ms. Simpson began class the next day with paired review of meaning, use, and equations represented by slope-related terms on the word wall. Students engaged in additional investigations involving slope, each of which she asked them to explain during class as she helped them use key vocabulary in their explanations. At the end of class she conducted a brief writing mini-lesson, showing students an example of a well-written explanation of slope, and then asked them to again describe what they’d learned in class that day. This batch of writing contained far more accurate descriptions of how and why to plot slope. The writing samples also gave her data to use for further differentiated decision-making.

to indicate thinking for later discussion. Such gradual movement toward student independence helps youth develop a strategy repertoire that serves them elsewhere. Frequent reading and writing also exposes them to varied uses of subject-specific

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## Two Important Strategies for Struggling Readers

Some middle-level youth need added literacy instruction, beyond what content-area teachers can reasonably be expected to provide.

vocabulary. Use of pairs or small groups, along with individual and whole class mini-lessons, allows teachers to address varying students' needs (Fisher & Frey, 2008).

What strategies might be worth modeling, according to the experts? In *I Read It But I Don't Get It*, Cris Tovani (2000) suggests teaching students to predict, make connections, question, determine importance, summarize, and monitor and fix misunderstandings. Michael Graves (2006) recommends explicitly teaching a few important vocabulary words and fostering word consciousness and word learning strategies, such as use of context clues, common word parts, dictionaries, and other reference tools, in *The Vocabulary Book*. In *Content Area Writing*, Harvey Daniels and colleagues (2007) recommend mini-lessons that teach young writers effective word choice, like Ms. Simpson did in her mathematics classroom. All three of these sources are popular study group texts and welcome additions to a middle-level professional development library.

Schools may want to adopt a reputable literacy across-the-curriculum program model. If so, Project CRISS (Santa et al, 2004) teaches students to build on prior knowledge and become actively involved in learning through organizing information and writing. West Ed's Strategic Literacy Initiative

(Schoenbach et al, 1999) involves teachers in showing students how to engage in metacognitive conversations before, during, and after reading. Deshler and his colleagues' (2001) Strategic Instruction Model shows teachers how to model and guide students to independent use of a variety of learning strategies. All the above program models encourage differentiation. Each also has an extensive research base that is easily explored with Internet and library searches.

### Targeted instruction

Some middle-level youth with gaps in literacy and understanding need added instruction, beyond what content-area teachers can reasonably be expected to provide (*See Methodology at right*). These students can be identified with state assessment results and teacher or parent recommendations. Such students may not be best served, at least at first, by attending to grade-appropriate state English language arts standards. Instead, literacy specialists can consider how to motivate and increase youth's confidence, as well as provide bits of instruction to address evident gaps in literacy understandings. Helpful informal data include interest inventories and informal oral reading and writing samples — data within which changes can easily be noted for ongoing progress monitoring. Interventions to accelerate progress are arguably best when developed in

collaboration with youth, and when they occur in regular classrooms organized with lots of opportunities for students to read and write in collaboration with each other and their teachers. However, students who seriously struggle may feel more motivated in out-of-class instruction that helps them bolster classroom participation while they accelerate progress in private. Such more individualized attention can help students who are identified for academic intervention as well as many of those who are identified for special education services.

Code-emphasis instruction may be appropriate when assessment indicates difficulties in reading words or spelling, and when youth agree and realize the benefits of instruction. For instance, students who struggle with determining pronunciation of unknown words can be excited to learn to decode by analogy, a treatment developed by Gaskins and colleagues based on study of phonograms in commonly used words (1995). Bhattacharya and Ehri (2004) describe a simple approach to helping older youth pronounce and spell multisyllabic words by guessing vowel sounds within syllables; this was Ms. Blake's strategy. Teacher-assisted repeated reading can help students develop more expressive and fluent decoding in context, involving one-to-one or small-group modeling and mimicking (Kuhn & Stahl, 2003).

The research articles cited above give detailed direction to how to provide such instruction.

Meaning-emphasis interventions are often helpful for readers and writers

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## METHODOLOGY

### Targeted Instruction for Students Who Struggle

Michael's teachers all saw his need for additional reading and writing instruction. This included the school reading specialist, Ms. Blake, who noted the eighth-grader's unsuccessful performance on the preceding year's New York State Assessment in English Language Arts as she screened candidates for Academic Intervention Services. Because Ms. Blake knew that such assessments yield only general information about a student's literacy abilities, she asked Michael to talk with her about his day-to-day reading and writing, and to read aloud 100-word passages from his English language arts and social studies textbooks. Ms. Blake noted that Michael was able to read only about 70% of the words accurately, and that he struggled mightily with reading multisyllabic words. His rate was slow, and his comprehension lacked nuance. Michael's writings were usually brief, lacked detail, and contained single sentences with many phonetically spelled words. Michael reported that he spent hours each night on homework and on the Internet, trading video game "cheat codes" with peers.

Because their needs for instruction were somewhat extensive, Ms. Blake worked with Michael and five other students for 45 minutes each day in addition to their other classes. At first, she helped Michael and his peers gain confidence, fluency, and comprehension. This included instruction in multisyllabic word reading, which they practiced as they read a student-selected text that all could read with roughly 90% accuracy: *Monster*, by Walter Dean Myers. They alternately read orally and silently, discussing predictions, important ideas, and questions as they read. The students selected and read several more such texts in quick succession, then switched to collections of shorter but more difficult texts. Ms. Blake picked out these texts with their social studies, science, and literature teachers to reflect curriculum concerns. She periodically conducted brief mini-lessons on each type of text, listening to students' oral reading and exploring their writing to note areas for added instruction. As students gained confidence in their grade-appropriate texts, she focused more intensely on state English language arts standards for the students' grade level, and she followed the students to other classes to ensure transfer of strategies to content-area work.

## Two Important Strategies for Struggling Readers

Published programs cannot address all the likely variations in older youth's literacy needs and interests, although they can provide helpful resources that can be modified to suit students' needs.

who are struggling. Such instruction generally seeks to have students make connections between in-school and out-of-school literacy. Teachers begin with texts that are somewhat easy for students to read and with instruction that is congruent with students' ideas of their needs and interests. As students gain confidence and strategies for reading and writing, teachers begin to introduce more sophisticated subject-area study. For instance, Jiménez (1997) used culturally relevant texts in two languages to teach bilingual, middle-level youth how to draw on existing language abilities to determine word meanings, questions, and inferences; Ms. Blake mimicked this approach with her use of student-selected texts early in her intervention. O'Brien (2003) successfully invited youth to design Internet-based multimedia inquiry projects while teachers helped them with needed reading and writing; Ms. Blake's students investigated academic topics in an inquiry project that allowed them such exploration. Such projects provide opportunities for teachers to model strategies that are specific to learners' needs and questions.

Published programs cannot address all the likely variations in older youth's literacy needs and interests, although they can provide helpful

resources that can be modified to suit students' needs. It is more likely that several programs will be needed in any one school for discerning teachers and students to design the most efficacious paths toward accelerated progress for those who struggle with literacy (Allington & Walmsley, 2007).

### Conclusion

Research suggests it is important that extensive reading and writing opportunity and instruction be provided across the curriculum. Subject-area teachers are in the best position to model literacy skills in their respective fields. Such instruction is especially important for those who struggle. Differentiated tasks, completed in small groups, can help such students develop understandings and strategies that follow teachers' models and mimic peers.

Additional instruction is warranted when youth struggle with reading and writing in ways that exceed content teachers' practices. Literacy specialists with the expertise to analyze youth's literacy and design instruction grounded in their capabilities can be most helpful. Such teaching provides youth with strategic insights so that their literacy, too, offers them life choices that are available to their peers.

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APPENDIX

*Research Reviews in Adolescent Literacy for Literacy Team Use*

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# Differentiated Learning in Science

## SUMMARY

Using graphic organizers and literacy strategies, two middle-level science teachers demonstrate their methods for helping students develop literacy skills - from organizing their thoughts for written expression to improving their reading comprehension.

*The challenge for* middle-level students is to continuously improve their reading comprehension, to increase concept understanding, to increase the process of reflection, and to increase analysis, synthesis, and evaluation skills. The challenge for content teachers is to provide effective literacy modalities through which our students can be more successful in mastery of both content and process skills.

*Science for All Americans*, published by The American Association for the Advancement of Science in 1989, was the first presentation of a unified vision of science literacy. It has served as a basis for discussions of the skills and knowledge that our nation's students should have. When the National

Science Standards were released by the National Academy of Science in 1996, the overview stressed that teachers need to use many different strategies in order to develop the understandings and abilities necessary for their students to achieve the degree of literacy described both in the Science Standards and in the earlier *Science for All Americans*. Recent journal articles have emphasized that well-planned activities which relate directly to the science concepts being taught increase students' understanding and mastery. The strategies described here are but some of the many possibilities available.

The purpose of this article is to suggest strategies that classroom teachers of middle-level students have found to

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*A National Board Certified teacher, Kathleen McIntosh has taught middle-level science for 18 years at Wilson Central School in Niagara County, where she is a mentor-coordinator. She is an instructor for NYSUT's Education & Learning Trust and a member of the union's Subject Area Committee for Science. She is a member of the Science Teachers Association of New York State and the National Science Teachers Association.*



**Mary Bishop, Saugerties Teachers Association**  
**Kathleen McIntosh, Wilson Teachers Association**

enhance student learning. In the Report of the National Reading Panel in 2000, graphic organizers were among the effective strategies cited to enhance comprehension.

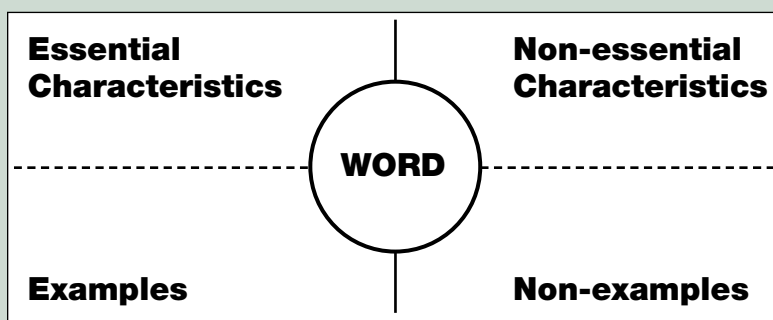
Graphic organizers help students to represent abstract information in more concrete form, to depict relationships among facts and concepts, to relate new information to prior knowledge, and often to organize thoughts for written expression. Graphic organizers exist in a variety of forms. This article focuses on three types of graphic organizers and five literacy strategies that have been used within the authors' classrooms.

The graphic organizers are: (1) Frayer diagrams (2) Concept maps, and (3) Venn diagrams. The literacy strategies include: (1) inference charts; (2) the strategy of who, what, where, when and why; (3) the vocabulary development/getting information from text or the Student VOCABULARY Strategy; (4) the KWL strategy; and (5) the Literacy Strategy of Semantic Feature Analysis.

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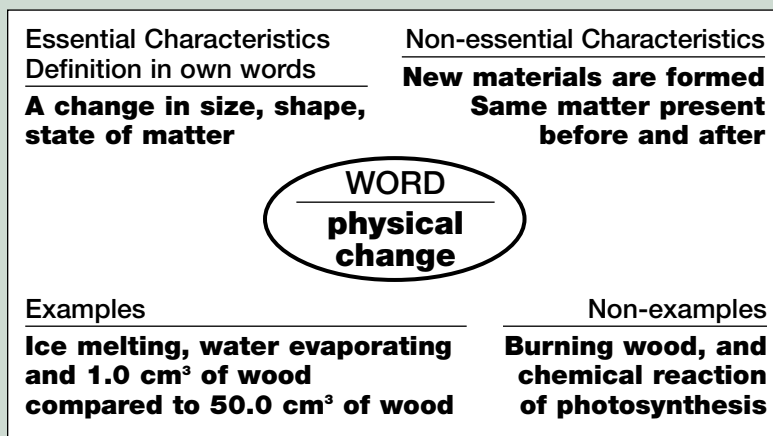
## METHODOLOGY

**Figure 1: The Frayer Model**



The Frayer model is easy to modify for both teacher and students. It presents material in a rational manner, is useful in comparing relevant and non-relevant information surrounding a science topic, helps to emphasize concept details and examples, and provides a format to point out science misconceptions. Below is an example.

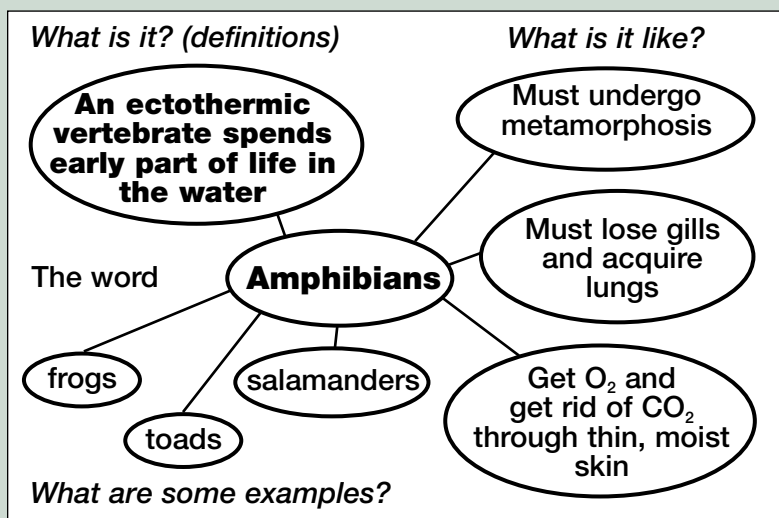
**Figure 2: The Frayer Model**



We have found this format helpful to students in learning important concepts. It helps organize conceptual vocabulary, and it is a good anticipatory activity. It can be used as a summary to help students connect instructional activities or real-world events. Furthermore it allows students to reflect on both their thinking and learning.

**METHODOLOGY**

**Figure 3: A Concept Map**



Above is an example used in a life science class.

**Figure 4: A Student-Made Concept Map**

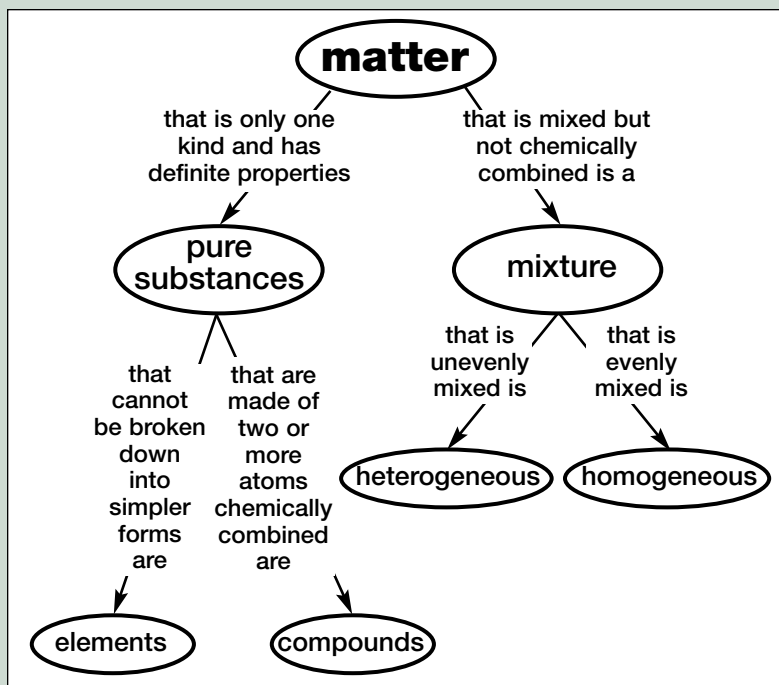


Figure 4 shows another student-made concept map. Here the connecting terms are the key to understanding student thinking.

**Graphic organizers**

1. **The Frayer model** is a word categorization activity that helps learners develop their understanding of concepts. (Frayer et al, 1969) It gives students an opportunity to briefly show their understanding and to elaborate by providing examples from their prior knowledge and own lives.

Figure 1 shows the general pattern for the Frayer model.

2. **A concept map** is a specific type of graphic organizer that helps students visualize various connections between words or phrases and a main idea. Joseph D. Novak of Cornell University developed the idea of concept maps in the 1960s. His work was based on the theories of David Ausubel (see the Novak citation at end) and the importance of prior knowledge as the key to learning new concepts.

Most forms of a concept map are composed of words or phrases surrounded by a circle or square that connect to one another and ultimately back to the main idea through graphic lines. These lines help students to “negotiate meaning” as described in the 1996 work of Hyerle titled *Visual Tools for Constructing Knowledge*. Concept maps have been shown to support struggling readers (Lovitt & Horton, 1994) by building off of students’ prior knowledge and by asking them

to reflect on their understanding while reading. Figures 3 and 4 show examples of student-made concept maps. Either type can be used as whole-class activities, individual tests or homework.

3. **Venn Diagrams** are a simple but powerful way to compare and contrast. The English logician John Venn (1834-1923) created the first schema to visually represent complex logical propositions and algebraic statements. Such diagrams describe and compare attributes and characteristics of things, people, places, events, ideas, etc. Figure 5 is an example of a Venn diagram wherein the unifying characteristic is shown in the overlapping area.

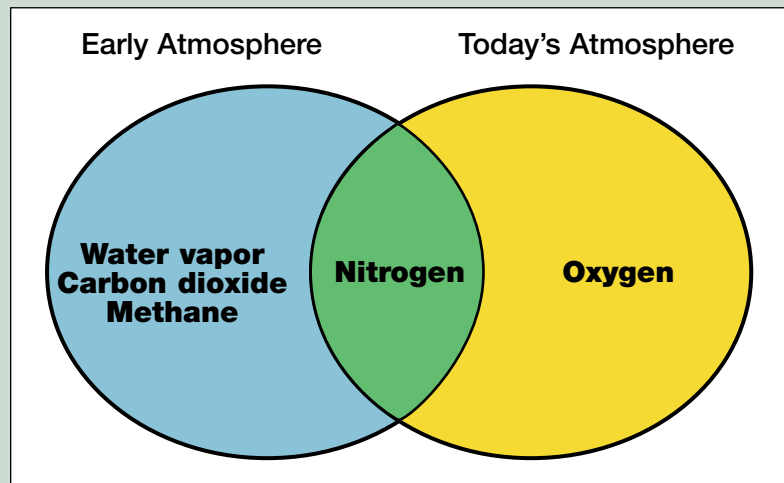
### Literacy strategies

1. **Inference chart modeling** is a literacy strategy that helps middle-level students distinguish inference from an observation made in reading materials such as textbooks, newspapers, and periodicals. This can also be a fun way to look at claims made in advertising of consumer products. Most science educators would agree that inferring is a basic science process skill that connects the students' observations with their hypotheses.

Figure 6 is an example of the inference chart model.

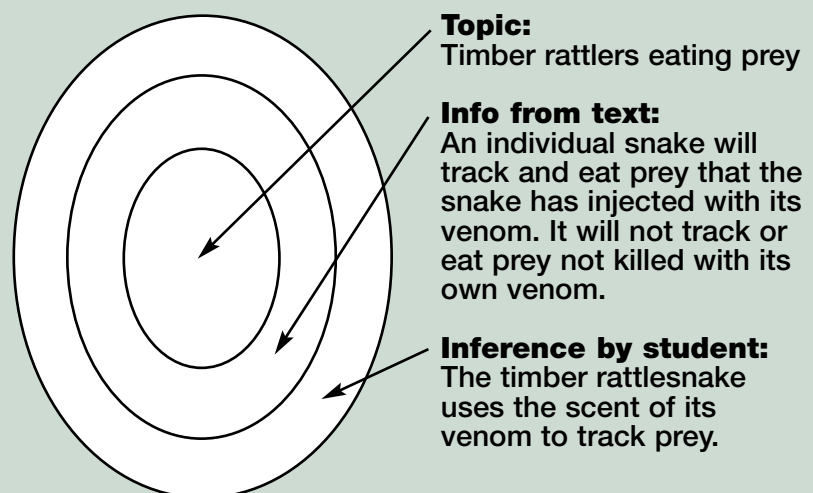
## METHODOLOGY

**Figure 5: Venn Diagram**  
used for comparing and contrasting



The comparison of early and today's atmosphere shown in the diagram above simply but eloquently answers two critical questions. The first question asks what items you want to compare and what characteristics the items have in common. The intersecting portion shows the common element of nitrogen being present. The second question is how the items are the same (the intersecting) and how are they different (non-intersecting portions)? The class discussion could spring from this potent diagram, or a student might use such a diagram to answer an assessment item.

**Figure 6: Inference Chart**



**2. The Literacy strategy of who? what? where? when? why? how?** helps students to be scientifically literate. Students should be able to read and analyze any writing to make responsible critical judgments. Based on the age-old newswriting concept, it is a useful strategy when studying current events, newspaper articles, and science magazines. Students should be guided to ask the following questions in order to complete such a form (see Figure 7): **Who** are the important figures associated with and affected by this event, discussion, discovery, etc.? **What** are the important developments, issues, events,

discoveries, etc.? **Where** did this event, discussion, discovery, etc. take place? **When** did this event, discussion, discovery, etc. happen? **Why** is this event, discussion, discovery, etc. important? **How** did/will/might the event, discussion, discovery, etc. affect later events, discussions, discoveries, etc.? As students read an article on science or other topics, they fill in the organizer with key words and elaborations, then compare and discuss their findings with classmates in small groups. If several different articles are being read by the class, each group could present a summary of their article using the format.

## METHODOLOGY

Figure 7: Who? What? Where? When? Why? How?

**Author:**  
**Topic:**  
**Title:**  
**Source:**

**who** →

**what** →

**where** →

**when** →

**why** →

**how** →

**3. The Literacy Strategy of Vocabulary Development/Getting Information from Text (Student VOCABULARY Strategy)** is one through which students deal with conceptual vocabulary in the context of a reading passage. The VOCAB strategy is a comprehensive activity — more interactive than guided reading. It helps students make meaning of vocabulary in context based on their individual learning styles. It works well with small groups of students. It works with reading-based learning disabilities in resource room

situations. If the VOCAB sheet text itself is too much of a challenge, the strategy can be simplified by drawing a picture and writing a brief explanation to demonstrate understanding of a term. The strategy works best when a teacher shares key vocabulary words with students in advance and asks students to use the VOCAB strategy to learn the meanings of any unfamiliar terms either before or during the reading of the passage. Figure 8 is an example of how the term “rotation” might be explained.

## METHODOLOGY

**Figure 8: Student VOCAB Strategy**

Vocabulary Word: **rotation**

1. Write the sentence in which it appears in the text:  
**The spin of an object in space is called its rotation.**
2. Based upon how it is used in the text, predict what the word means:  
**It means the Earth spins around in a circle as it moves.**
3. Consult an “expert” for the actual definition (e.g., a friend, teacher, text resource).  
Expert: Expert’s definition: **(glossary)**  
**The spinning motion of a body on its axis.**
4. Show your understanding of the word by using it in a sentence of your own:  
**The Earth’s rotation is like the spinning of a basketball on my finger.**
5. Choose one of the following ways to help you remember the word’s meaning:
  - Draw a picture of what the word means to you; select and perform a miming action that reminds you of the word
  - Connect the word with something similar that you’ve heard — in a story, a news report, or a song. Write down an association or connection you have made:  
**Using a top, I would make it spin on a table on its axis.**
6. Explain why you chose this way to represent what the word means to you:  
**It would show the top spinning around in a circle as it moves on its axis. At the same time, it would also be moving in different directions on the table.**

# Differentiated Learning in Science

## 4. The Literacy Strategy of Getting information from Text

K-W-L: What I Know; What I Want to Learn; What I Learned, commonly known as K-W-L (and the variation Before-During-After, or B-D-A) is a strategy that can be used to help students predict and connect information with prior knowledge. Individual students, small groups of students, or an entire class can brainstorm prior

knowledge and vocabulary related to a topic. In this role, it serves as a way to engage students. Figure 9 shows a blank K-W-L.

A variation with these headings as shown in figure 10 might be preferable in some situations.

Following the activity or reading, completion of the “Learned” column provides an opportunity to explain and to elaborate.

Comparisons between “What I Know” and “What I Learned” may also serve to help students check their own misconceptions and to help teachers assess student learning. Students begin the process by filling in the first two sections of the chart, and misconceptions generally show up in the “What I Know” column.

### METHODOLOGY

Figure 9: K-W-L

<b>K</b> <b>What I Know</b>	<b>W</b> <b>What I Want to Know</b>	<b>L</b> <b>What I Learned</b>

### METHODOLOGY

Figure 10: B-D-A

<b>B</b> <b>What we know before reading</b>	<b>D</b> <b>Questions and important information during reading</b>	<b>A</b> <b>Conclusions made after reading</b>

**5. The Literacy Strategy of Semantic Feature Analysis** helps students ascertain a term's meaning by comparing its features with those of other words that are in the same general category. This strategy provides students with a visual representation to rely upon to discern the similarities and differences between related terms. This strategy is most effective when considering discriminating features. The organizational approach involved helps to develop science process, classification and data recording skills. Misunderstandings and misconceptions can be dealt with as students are asked to reflect on their work and to explain the rationale behind questionable choices. While highly organized, the matrix is flexible in that it can be expanded upon by the addition of both terms and features.

Figure 11 is an example used in a physical science classroom.

Because they have been shown to help students:

- represent abstract information in a more concrete form;
- demonstrate relationships among facts and concepts;
- relate new information to prior knowledge; and
- organize thoughts for written expression,

graphic organizers can be among the most effective strategies for teachers of middle-level students to enhance student learning and comprehension.

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Report of the National Reading Panel, [www.nationalreadingpanel.org](http://www.nationalreadingpanel.org)

## METHODOLOGY

**Figure 11: Vocabulary Development: Semantic Feature Analysis Grid**

<b>Category:</b>	<b>states of matter</b>		
	<b>terms</b>	<b>features</b>	<b>features</b>
solids	Definite shape	Definite Volume	Ice (H <sub>2</sub> O)
liquids	No definite shape (shape of the container)	Definite Volume	Liquid water (H <sub>2</sub> O)
gases	No definite shape	No Definite volume	Water Vapor (H <sub>2</sub> O)



# Read Alouds Move to the Middle Level

## SUMMARY

While reading aloud has long been shown as a successful way to improve students' literacy skills at the pre-school and elementary levels, less is known about the practice and results at the middle level. Here, the authors observe reading aloud in middle-level classes to see how it's done and speak to teachers involved with the program to find out how it is working.

*Let's take a* hypothetical walk around a school to see what type of instruction is occurring. We stop and visit one class where a teacher is reading aloud to students. The teacher introduces the book, provides background knowledge on topic, structures and vocabulary, and sets a purpose for reading. The students make predictions. The teacher starts reading the book aloud, stopping to verify predictions, clarify points and ask questions.

An excellent example of a read aloud lesson in an elementary school, you think. Except this is not an elementary school. This is a middle school

and read alouds are part of teachers' daily instructional practice. While reading to and with children (another term for read alouds) is a common practice at the earlier grades and has much evidence to support its use, the practice of reading aloud to older children is not as well documented.

This article presents research on reading out loud, especially to middle-level students. It provides suggestions for best practices using this technique with middle-level students and describes how the practice was used in several classroom situations. It concludes with suggestions for professional development on how to best implement this practice.

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*Deborah Getman is a literacy coach at PS 207 in Marine Park, Brooklyn. Her school recently became kindergarten through grade eight and she coaches teachers from K-8. She also works as an adjunct professor at Touro School of Graduate Education. She teaches early literacy and basic reading instruction.*



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## **READING ALOUD TO CHILDREN**

*Becoming a Nation of Readers* (Anderson, Hiebert, Scott and Wilkinson, 1985) reported: “The single most important activity for building the knowledge required for eventual success in reading is reading aloud to children” (p. 23). The working definition of reading out loud is the teacher (or someone else) reading to students, whether or not they see the text.

Reading aloud provides adult models of good readers. Children learn reading strategies and vocabulary words while building background knowledge (Fisher, Flood, Lapp & Frey, 2004). Adult interaction motivates children to read themselves. Children develop sense of story and an understanding of different literacy styles (Bruneau, 1997; Fisher, Flood, Lapp & Frey, 2004). Read alouds develop emergent literacy skills, phonological and print awareness, beginning phonics skills (Allor & McCathren, 2003) and decontextualized speech (Beck and McKeown, 2001). In the early

grades, listening skills are more advanced than reading skills. Reading to children provides access to information, characters, places and facts at lower grade levels than if children read by themselves (Coiro, 2003). Meyer, Stahl, Wardrop and Linn (1999) state: “Reading to children has been suggested to facilitate children’s vocabulary, initiate them in the language of literature and contribute to their development of sight vocabulary” (p. 56).

Reading to children develops literacy routines that draw children’s attention to information in the text. Children with limited exposure to read alouds often find it difficult to sit still (Meier, 2003). Children respond by calling out, commenting on matters not related to the text and having conversations that are not related to the story. Teachers respond to “off-task” behaviors by engaging children in other activities that are fun and educational, but do not stress the centrality of the text (Meier, 2003).

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Reading to children develops literacy routines that draw children’s attention to information in the text.

Reading out loud helps second language learners develop English literacy. This activity teaches the meaning of words in context, proper stress and intonation of English, as well as developed thinking skills in English.

### READING ALOUD TO ADOLESCENTS

Children of all ages benefit from being read to (Sharpe, 2005; Koralek, 2006; Albright & Arial, 2005). Reading out loud is not just for the early school years. Students approaching the middle level encounter greater content material, and new and exciting vocabulary. Teachers whose voices are engaging will “hook” students into new subject matter. The teacher brings “life to text — a voice to a text” (Ivey, 2003).

In the upper grades, reading out loud can connect children to the theme or content being studied. It affects children’s behavior. Reading out loud motivates children while making text more comprehensible for children with reading difficulties. Reading picture books is an ideal technique for content-area teachers because of the short format, in-depth treatment of topics, and visual and content appeal of the books (Alvermann and Phelps, 1998 as quoted in Albright, 2002).

Reading out loud can be used to develop interest and motivation; introduce new topics; illustrate the applications of content area concepts; contribute to students’ personal growth and social response; and develop knowledge of expository text structure (Albright, 2002). Children

make connections between school and the real world (Albright & Arial, 2005). A high school teacher in France achieved success by reading to a class of underachieving students. Students became interested in books read to them, which they could not read on their own. They began to talk about the books and how they related to their own lives (Leveen, 2006).

Albright and Arial (2005) summarized research on read alouds at the middle level. Teachers read aloud to model aspects of fluent reading, make texts more accessible to students, and ensure students were exposed to important information. For middle-level students with decoding problems, read alouds let the students concentrate on meaning — not pronunciation — of unknown words.

Reading out loud helps second language learners develop English literacy (Kelly, 2006). Kelly used read alouds to develop oral fluency with adult Chinese English language learners. This activity taught students the meaning of words in context, proper stress and intonation of English, as well as developed thinking skills in English.

## SOME EXAMPLES OF READ ALOUDS AT THE MIDDLE LEVEL

With a plethora of novels and diverse subject matter, teachers at the middle level feel overwhelmed. They question whether there is enough time to complete the demands of the curriculum and still have the time to read aloud. For many middle-level children this becomes the best part of their day. An engaging question or a powerful excerpt from the book and the teacher has the students sitting on the edge of their seats. For example, *Number the Stars* (1989) by Lois Lowry is an introduction to the Holocaust where no one dies. Although many themes could be developed, a powerful one is friendship, hence the question: “What would you do if some evil person or a government threatened to hurt your friend *and* you if you helped him or her? After a brief discussion, the teacher reads how Annmarie ripped her Jewish friend’s Star of David necklace from her neck as the Nazis came into her bedroom. “She grabbed the little gold chain, yanked with all her strength, and broke it. As the door opened and light flooded into the bedroom she crumpled it in her hand and closed her fingers tightly. Terrified, both girls looked up at the three Nazi officers who entered the room.” The teacher asks, “What will happen next? Did Annmarie do the right thing?” “Would you have

done the same?” Reading aloud brings life to this story of fear and friendship.

Another story with spellbinding passages of friendship and peer pressure is S. E. Hinton’s *The Outsiders* (1967). Students at the middle level are searching for identities. They feel pressured to conform to peer groups. The teacher asks the class for their definition of a gang, then reads aloud the thoughts of one of the characters, Ponyboy. “You take up for your buddies, no matter what they do. When you’re a gang, you stick up for the members. If you don’t stick up for them, stick together, make like brothers, it isn’t a gang any more. It’s a pack. A snarling, distrustful, bickering pack.” The teacher asks the class if that is true. Have they ever had those thoughts? The discussion gets passionate as students relate their feelings about gangs.

Brown and Fisher (2006) describe a balanced literacy program implemented in their school. One part of the program was reading aloud to students. In addition to teachers reading out loud daily to students, the school purchased CD players and books on disk. Students listened to and read the books during independent reading time. Students who listened to the books made growth in reading on the statewide tests. Some students

In addition to teachers reading out loud daily to students, the school purchased CD players and books on disk. Students listened to and read the books during independent reading time. Students who listened to the books made growth in reading on the statewide tests. Some students stopped using the tapes as they found they could read faster than the tape.

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## Read Alouds Move to the Middle Level

Teachers are not the only ones who can read aloud to middle-level students. Children themselves can read to the class.

stopped using the tapes as they found they could read faster than the tape. These books on tape helped all students read independently.

Teachers are not the only ones who can read aloud to middle-level students. Children themselves can read to the class. A student who writes an excellent piece can read it to the class. The teacher can discuss what made it a good example of a text and why it was worthwhile listening to. This builds fluency in terms of intonation, expression and rhythm as they read.

### **OBSERVATIONS OF READ ALOUDS AT THE MIDDLE LEVEL**

Authors Getman and Press observed three intermediate general education classes. The children were a mixture of African-American, Hispanic, and Caucasian, which is typical of the population of the area. Some students spoke little or no English. There were several inclusion children with appropriate IEPs in each class. Two of the teachers were the regular classroom teachers; one was the academic intervention teacher who was conducting a whole-class intervention. In the first class, Mrs. Perez was helping students form text-to-text connections among several books by author Janell Cannon. Mrs. Perez had previously read aloud other books by the author. After reviewing these books, she introduced the new book *Pinduli* (2004). Mrs. Perez had the students

figure out the theme of the book by synthesizing information and using the “Stop and Jot” technique to note clues to the theme. Mrs. Perez read the text and had students look at the pictures. She modeled “think-alouds.” She stopped and asked questions to clarify the text. Her reading was done with emotion and used dramatic effects to enhance comprehension. Most unknown vocabulary was defined in context. Other words were noted for later discussion. After the initial read aloud, possible themes and clues hinting to them were listed on the board.

In the next class, *An Angel for Solomon Singer* (1992) by Cynthia Rylant was read aloud. The aim of this lesson was to determine important details while taking notes on the text. This skill is especially useful when students take the state English language arts exam. As Ms. Cantelmo read the book, students jotted down ideas on a graphic organizer divided into: **Events** (sequence to be used for retellings) or **Thinking** (questions, wonderings, or reactions to help with clarification of the text and information on character traits). After the read aloud, the class discussed their notes and determined how the notes helped them remember the story and important details about it. Students generated questions based on their notes and realized that some questions were not answered in the text.

Lastly, Mrs. Kelly's class was involved in an interactive read aloud using the text *Would You Salute?* (2005) by D. Kelly Steele. This book is about a half-Jewish child during the Holocaust who must make some important decisions. The aim of this lesson was to form text-to-self, text-to-text, and text-to-world connections. In this class some children took notes on laptop computers during the read aloud. This was an interactive read aloud and Mrs. Kelly interrupted the reading several times to discuss important aspects of the text. For example: "How would you feel?" "How did kids feel then and now?" "What would you do?" This text was part of a unit of study on the Holocaust. The children had learned about and completed independent research on aspects of the Holocaust. During and after the read aloud there were many connections to the social studies content area. There were several points in the book where Mrs. Kelly asked a question. The students used the "Turn and Talk" technique to expand and clarify text issues. Children using computers added information they had recorded in their notes.

All the teachers we observed indicated that they felt the read alouds helped their students develop their literacy skills in a positive manner. Author Getman is the literacy coach

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## METHODOLOGY

### Implementing Reading Aloud at the Middle Level

As professors of literacy, we want graduate students to learn the effective use of reading aloud as a strategy to improve instruction for middle-level students. Teachers, as well as others with responsibility for literacy and professional development — including principals, department chairpersons, and literacy coaches — can generate interest about the implementation of the read alouds at the middle level. Following are some suggestions to share the advantages of read alouds:

1. Teachers and administrators can model the read aloud strategy at faculty and department meetings. Use intonation, facial features and gestures — all the techniques that teachers need to use when reading to students. Serve as a role model for how to effectively read aloud to an audience.
2. Convene a professional learning community, an action research project, or a building committee focused on the use of read alouds as a strategy to increase comprehension. The group could develop a selection of materials correlated to content areas that can be used for reading aloud. These materials should be of different lengths, genres, topics, reading levels, etc. Materials should also be from many points of view and include multi-cultural literature.
3. Invite authors to provide readings for students, and include faculty members. This shows teachers how the author wants his or her book read.
4. Encourage colleagues to practice reading selections to each other before they read them to students.
5. Encourage content-area teachers, who may have little background in literacy instruction, to teach content-area reading and listening skills through read alouds. Offer to co-teach a literacy lesson in a content classroom, modeling read aloud and the teaching of content-specific vocabulary. This will help students to comprehend both fiction and non-fiction materials.
6. Request that the library or resource center order tapes, CDs and videos of books read aloud by famous people. Include a copy of the book itself. This will engage readers at all ability levels. Similar materials are available as computer programs.
7. Explore developing cross-age and peer tutoring programs where students select, practice, and read their favorite texts to other students. While this type of program is used widely at lower levels, there is no reason it could not be implemented at the middle level.

## Read Alouds Move to the Middle Level

at this school and was the person most responsible for implementing the program to the extent it is used. Principal Mary Bosco is extremely supportive of the use of read alouds, both in terms of professional development and in supplying materials used for the program. This support is vital for any program to succeed.

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# Dispelling the Myth of the Perfect Reader

## SUMMARY

To determine why some students feel estranged from the reading process and to create serious, motivated readers, a veteran middle-level reading specialist says it's first necessary to deconstruct the myths that surround what it means to be a good reader.

*Reading is a* complex process. It is more than simply being able to pronounce words; it is the ability to engage with texts through the use of metacognitive strategies. Reading involves the use of prior knowledge, syntax, grammar, graphophonics, the reader's knowledge of the concepts of print, and the meaning derived from them. To read effectively, we must activate all these systems of language simultaneously. In order to master the art of reading, we must then be able to verbalize the steps we have taken to comprehend.

For the middle-level reader who struggles with a text, that student's ability to explain what caused the problem usually amounts to phrases such as: "I hate to read" ... "Reading

is boring" ... "I'm no good at this reading stuff." These remarks are indicative of the frustration students feel when they are not empowered with the proper tools or vocabulary to explain their own struggle. These developing readers and writers are likely to respond by attempting to contradict any view of themselves as literate, instead assuming an attitude of apathy and defeat.

As a reading specialist in a middle school, I work to uncover the root of why students feel disenfranchised from the reading process. To create authentic and motivated readers, I must first deconstruct the myths that surround what it means to be a "good reader." Students often fail to recognize or verbalize their own strengths because they

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harbor unfair expectations of what they should be able to achieve as a reader. By instilling a common language and a myriad of opportunities for reflection, teachers have the ability to harness the power of talk to generate transformative thinking in the areas of student literacy.

**Deconstructing the Myths**

*Good readers only read great works of literature.*

How often are students given choice over what they can read in the classroom? What literature is valued by the educational system? In the traditional English classroom, the answer would be the literary canon, which is composed of classic works of literature that have been universally deemed as must-reads for all students in English classes. Even teachers who pride themselves on providing students with a multitude of genres and opportunities for reading may unknowingly be biased toward certain types of literature. Students need to see themselves reflected in what they read, especially middle-level students. By allowing students to select from the high-interest, high-quality young adult literature that is available, we

increase the potential for students to take more risks in their attempts to comprehend and immerse themselves in the material. We need to allow struggling students to gain a measure of success by letting them begin their journey with materials that appeal to their personality, culture, gender, hobbies, and interests. Unfortunately, classrooms are often set up and centered on a cultural ideology or backdrop that is traditional, white, and upper class. This marginalizes the experience of every student who brings a more diverse cultural palate or experience to the classroom, or whose taste may not be classical works of literature. This is not to say that we ignore the works of literature that have been deemed classics; they, too, are critical for students' growth and development. However, students must be afforded opportunities to engage and enjoy texts that appeal to their unique sense of taste, even if the teacher doesn't consider those works to be "worthy" literature.

When working with developing readers it is important to respect and validate our students' individual literacy.

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Students need to see themselves reflected in what they read, especially middle-level students.

## Dispelling the Myth of the Perfect Reader

I hated reading *Moby Dick*. Even now, years later, the cover of that novel causes me to shiver. Although a highly proficient reader, I am also a reader who has struggled. What I reinforce to my students in telling them my story of *Moby Dick* is that there is no perfect reader.

Allowing student choice, and respecting those choices, communicates to our students that we do view them as equal contributors to the reading community we strive to develop.

*Good readers can read really fast and they never make a mistake.*

When I was a freshman in college, majoring in literature, I struggled painfully through reading *Moby Dick*. I was often behind the rest of my class with reading. I had to read passages more than once in order to do the necessary critical analysis that my professor expected. I found myself disassociated with the text, unable to make connections with the language, and uninterested in the development of the characters and their struggles. I hated reading *Moby Dick*. Even now, years later, the cover of that novel causes me to shiver. I share this story with my students each year because I do not want to be another mythical reader for them. Although a highly proficient reader, I am also a reader who has struggled. What I reinforce to my students in telling them my story of *Moby Dick* is that there is no perfect reader.

Even the most skillful reader struggles at times; however, the proficient reader understands that reading is not solely about the recognition of words, but the buildup of knowledge and meaning that is acquired by interacting with the text. We cannot expect

students will be consistently fluent with all texts. In fact, we must let students know that even the best of readers will “miscue,” which is when a student’s observed response in reading differs from the stated language of the text. (Goodman, 1993) It is more likely miscues will occur when students are encountering text for the first time or working with an unfamiliar genre. Miscues should not be viewed as mistakes, but rather as opportunities to gain valuable information regarding the ways a reader processes language. The student who is overly concerned with perfection is more likely to misread the text out of a basic fear of being wrong. Fluency can be interrupted by a student’s fear of taking risks or essential gaps in the background knowledge necessary to understand the concepts being presented in the work. Students’ perceptions about the reading process have a direct impact on their overall performance. (Harste & Burke, 1980)

It is essential that we deconstruct the myth of the perfect reader as someone who reads quickly and effortlessly. We must encourage students to jump headlong into reading with a willingness to make mistakes, get messy, be playful, and use language as a vehicle for discovering insights about themselves. Inviting students to reflect on their own strengths and weaknesses in reading is one of the most effective ways a teacher can increase the likelihood of turning

the reluctant student into the lifelong pursuer of literacy.

### **Why Reflection Works**

We must listen to the stories our students tell. Students do not always have the proper language to explain what they are doing or failing to do as readers. We must embolden students with that language to further their pursuits in the areas of literacy.

A seventh-grade boy taught me this.

My student's name was Carmine. He was a hard-working student who struggled with inference. One day, I was reading aloud to Carmine and his peers. After a page or two, I asked my students to continue reading the chapter silently. Carmine begged me to continue reading aloud. He told me he enjoyed the text so much more when it was read to him. The other students nodded their heads in vigorous agreement. This is a teachable moment in the reflective classroom. I decided to explore the reasons why my students enjoyed having texts read to them rather than engaging the material on their own. It was obvious that my students' comprehension greatly increased when being read to as opposed to reading silently, but I wanted to look for specific reasons why this occurred.

I asked the students to explore, in writing, if they would prefer being read to or reading silently. They were

required to give specific reasons for their choices. When we shared our responses, Carmine said, "My teacher is so much better at doing the voices of the characters than I am. How does she know how each character says his or her lines?"

A response such as Carmine's is very telling. Although Carmine does not have the vocabulary to express it, he is actually stating that he does not have proper knowledge of how to fully use literary devices such as intonation, implied characterization, dialect, and dialogue. From a simple student reflection, I realized that my entire class could benefit from a specific lesson that allowed students to explore these particular devices.

Carmine and his classmates showed me the value of reflection. After that lesson, I realized my students need to be able to talk with me about what specific aspects of reading cause them to struggle. Reflective literacy journals are an excellent way to ensure that students have a platform and a safe space to voice their feelings.

The reflective journals we use daily in our classroom are simply black-and-white notebooks that we store on a shelf in the room. Entries contain students' responses to teacher, class, or self-generated questions about the reading and writing processes. The responses I read in these journals

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We must encourage students to jump headlong into reading with a willingness to make mistakes, get messy, be playful, and use language as a vehicle for discovering insights about themselves.

## Dispelling the Myth of the Perfect Reader

dictate the mini-lessons I will teach my students, and the strategies and vocabulary I will supply to embolden their learning.

It is important to mention that these are process-driven, not content-driven, journals. A content-orientated classroom is generally one that centers on a set curriculum that is driven by the teacher, as opposed to a process-oriented curriculum that believes the student is a pivotal shareholder in all decision-making regarding learning and instruction. In *The Schools We Have, The Schools We Need* (1998), Richard Allington stresses the importance of process over content when he states, “Unfortunately, we assign children work to complete and confuse that with teaching. What all children need, and some need more of, is models, explanations, and demonstrations of how reading is accomplished...yet much of the work children do in school is not accompanied by any sort of instructional interaction.” (Allington, 1998)

Reflective journals allow students to interact with the text, their teachers, and with their peers. Reflective journals require students to strive to comprehend, but are designed to provide them with a place to investigate what leads to enhanced meaning and what creates gaps in understanding.

Students’ focus might be on syntax, strategies, vocabulary, understanding their own miscues, graphophonics, and utilizing metacognition, all as a means of constructing deeper insights with text. Constance Weaver describes process learning best when she writes, “We want students to understand the role of reading in the construction of knowledge, and so we provide opportunities for them to use reading and writing to learn. To do so, we help them develop questions that they want answered and help them find ways to discover their own answers.” (Weaver, 1998)

Using reflection is a powerful tool to further your students’ relationship with themselves in becoming stronger, more successful readers and writers.

It is important that teachers recognize they have an important role in fostering students’ ability to reflect. At the middle level in particular, students are often very self-conscious. This is a time of incredible change and growth, as students strive to be more autonomous from parents and educators. This self-conscious behavior can manifest as disinterest but usually is based on fear or self-doubt. Providing students a safe space to explore their feelings is pivotal. However, just providing students with the vehicle for this type of exploration may not be enough. Students at this level of their

intellectual development in particular need to see models of what reflection looks like. Early adolescents have a tendency to generalize their ideas and look at things very literally. In order to scaffold students' attempt to reflect on a level that will increase their overall literacy potential, teachers must be willing to diligently demonstrate what good reflection looks like and be willing to step in when reflections are off base.

Regardless of what methods of reflection are used, realize talk is powerful. The teacher who is cognizant of the need for students to share their fears and insights, and who provides students with access to language and strategies that build on sharing, is the teacher who will inspire more successful and authentic literacy in the classroom. Through the power of talk, new definitions of readers can emerge.

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## METHODOLOGY

### The Many Ways to Use Reflection in Your Classroom

Although reflective journals are an effective means of encouraging students to hold conversations about the reading process, they are by no means the only way to employ students in the art of reflection. Other methods include:

- Using exit cards, Post-it notes, graphic organizers, surveys
- Creating guided reading circles and book groups
- Using student-directed mini-lessons
- Socratic circles
- Reader's theater
- Student-led miscue analysis
- Conferences
- Peer-reading/writing partners
- Ethnographic studies
- Writing literacy memoirs
- Writing wikis and blogs
- Interviewing



# How Classroom Research can Improve Literacy Instruction

## SUMMARY

In this article, two assistant professors in Lehman College's Department of Middle and High School Education argue in favor of classroom research in the context of K-12 schools, as well as teacher education programs. Supported by a substantial body of research, the authors base these arguments on their own experiences as classroom teachers and teacher educators.

*As professional* educators whose careers have followed a trajectory from classroom teacher to teacher educator, the most valuable thing we can share with our students is *praxis*, or “practice grounded in theory and theory grounded in practice.” (Wink, 2000, p. 60) It is in this zone of praxis that we help new teachers grapple with the understanding of not just what we do or even how we do it, but also why. When the what and how are connected to the why, teachers can be powerful and effective decision-makers in their classrooms because the choices they make are grounded in theory rather than handed down to be passively reproduced. This nexus of theory and practice is at its most

powerful when teachers can begin to develop their own praxis by looking at their work with students through a theoretical lens. This way of working goes by several names. It has been called reflective practice, classroom research, teacher research, classroom inquiry and action research. Simply defined, it is “systematic and intentional inquiry carried out by teachers” (Cochran-Smith, Lytle, 1993, p.7).

Both authors of this article have come to value action research for the impact it has had on our own classrooms, as well as the transformative effect we have seen it have on our students' classrooms. Matthew, a graduate student in the English Education program, has been studying the impact of a peer independent reading

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program on English language learners in his eighth-grade classroom for the past two years. These students, who were struggling and reluctant readers before he began implementing the reading program he designed, are flourishing. He is currently working with Amanda on preparing this research to submit for publication. He undertook this work when he noticed something exciting that was happening in his classroom and wanted to study and document the phenomenon so he could better understand it and share it with others in the field.

This result is consistent with the long and rich history of action research. According to Cochran-Smith and Lytle (1993), “The unique feature of the questions that prompt teacher research is that they emanate from neither theory nor practice alone but from critical reflection on the intersection of the two (p. 15).” According to Ferrance (2000), “Research done with the teacher’s students, in a setting with which the teacher is familiar, helps to confer relevance and validity to a disciplined study” (p. 13).

Action research encourages teachers to develop a sense of agency regarding

their work. In simplest terms, the teacher-researcher uses student work samples and the results of a variety of assessments from rubrics to test scores to determine the impact of his or her practice on student learning. In most cases, no extraordinary interventions or experiments are taking place. As the normal work of the classroom goes on, the teacher gathers data and uses a variety of means to reflect on that data in an attempt to understand its significance. The purpose of the research is to determine the effectiveness of a particular set of teaching strategies.

Classroom research begins with the teacher posing a question that frames a particular set of teaching practices within a theoretical construct. The teacher-researcher may, for example, embark on a study of what happens during independent reading in her eighth-grade classroom. Invariably, though, such studies tend to begin with the teacher reflecting on his or her own practice, questioning every aspect of the work — from how students choose books to whether independent reading is really the best practice to be engaged in.

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## How Classroom Research can Improve Literacy Instruction

By turning a researcher's lens on my classroom I was able to step back and notice what was going on and what needed to be changed.

### **Amanda Gulla: The Middle-Level English Language Arts Classroom**

Early in my teaching career when I was getting my master's degree it was my own classroom research, studying the way my seventh- and eighth-grade students worked independently during writing workshop that set me on the path toward doctoral study. My thesis project was focused on how writing conferences helped students with revision. My data consisted of transcripts of tapes of conferences with students, which I coded and annotated using a form of discourse analysis that looked for patterns in dialogues. Although the students were working independently in their writing workshop and I sat with students one at a time for these conferences in a relatively quiet corner of the room, there was a fairly steady stream of interruptions from other students who needed supplies or guidance. While I took these interruptions in stride as they occurred, troubleshooting as necessary, something different happened later as I was listening to and transcribing the tapes. I began to notice that there were definite patterns in the types of interruptions, and that many of them could be prevented with some careful management on my part. By turning a researcher's lens on my classroom I was able to step back and notice what was going on and what needed to be changed. The students had been

telling me all along what kind of support they needed, but the picture was not clear to me until I had begun to deeply attend with a researcher's ears and eyes, listening to and transcribing tapes that gave an objective picture of what was going on in my classroom during writing workshop.

This experience transformed my teaching. While I had always wanted to be a teacher who gave my students agency to function independently, I needed the clarity of a research problem to help me understand how to make it work. Immediately, I redesigned my classroom to make writing materials easily accessible to students. I began to organize my class into writing groups that I would confer with on a regular basis so the students could get more direct support from me and from each other. Something else began to happen, too. I had already begun designing mini-lessons based on issues I had identified in the students' writing, but my classes were so diverse in their abilities, many lessons were targeted toward half the class at best, while they were either too easy or too difficult for the rest of the students. By working with smaller groups, I was able to tailor the lessons more closely to the specific students' needs, and make them briefer and tighter. Classroom management was no longer the issue it had been when I was trying to teach one strategy to the whole class.



Students began to notice these changes, of course. When they asked why we were suddenly doing things differently, I explained that I had been doing research to learn how to make our classroom work better. Letting students in on this “secret” led them to become more invested in their own learning. Even when some still struggled with their writing, my new teacher-researcher’s lens helped me to look at their work in ways that allowed me to learn things about teaching writing that I have been able to generalize, which is a key purpose of action research. As MacLean and Mohr (1999) say, “No matter what the performance or the quality of the work done, student errors become something of interest, not something that needs to be punished or hidden. They are the points of change, informative shifts, and important clues to the learning process. (p. 108)

In later years, before becoming a professor, I worked as a consultant for the New York City Writing Project, providing literacy staff development to Bronx middle schools. One eighth-grade social studies teacher, Mary, was concerned that the curriculum she had to teach packed so much content into a school year, there was no opportunity for students to develop an understanding of history or cultures in the brief time allotted each

topic. As students were required to take a comprehensive standardized test, she had to cover all of American history from the Revolution to the Cold War between September and April. “I feel like I’m guilty of drive-by teaching,” she complained. Mary worried that if she moved as rapidly as the curriculum demanded, students would not be able to achieve any kind of understanding that would allow them to pass the test, let alone come away with any understanding or recollection of what she had taught them.

### **Teaching with Visual Images**

At this point in the year she was about to embark on a study of the Civil War and Reconstruction. I suggested that one way she might give students some sense of what each historical era was about would be to supply them with iconic visual images. As Susan Sontag (1977) points out, “The photograph is a thin slice of space as well as time” (p. 20). Since Matthew Brady so powerfully captured the brutality of the Civil War in photographs, this seemed like the perfect historical era with which to begin teaching with visual images.

Mary was curious about the impact working with iconic visual images might have on her students’ understanding and memory of what they were learning. She wanted to gather

When they asked why we were suddenly doing things differently, I explained that I had been doing research to learn how to make our classroom work better. Letting students in on this “secret” led them to become more invested in their own learning.

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## How Classroom Research can Improve Literacy Instruction

data that would help her understand what impact our work with photographs might have on her students' ability to recall and describe events in their historical context.

Students were asked to write in response to the photographs. We chose six images for her class of 24 students who were seated four to a table. Each student at each table got his or her own copy of the picture. Each table was looking at a different image. We began by asking students to spend a few minutes looking closely at the picture we had given them, then label the parts of the picture with words. When they finished, they were to pass their picture along to the next person and see if there was anything they had missed or seen differently from someone else. On the next pass, we asked them to write a one-sentence caption for the photo. Finally, we asked them to imagine they could place themselves inside the picture, and write in any form they chose from that point of view. Some students wrote poems, others wrote monologues, one wrote a letter home from a wounded soldier, another wrote in the form of a prayer.

Students at each table stood and shared their photograph with the rest of the class, then some of the students shared their writing. When we had completed this activity we asked the students what questions the photo-

graphs had raised for them. This gave us a sense of what issues we could explore in the compressed time allotted for the Civil War. The students wanted to know who the people were in the photographs, when this was taking place, what the war was about and who had won. These were the same essential questions most teachers would be addressing in a social studies class. The crucial difference was that these questions had come from the students. Because the answers to these questions came in response to the students' authentic desire to know, students were engaged in the subsequent readings and discussions.

After the success of the Civil War unit, Mary wondered if she could replicate this way of working as she and her classes moved forward in history. I helped her to locate visual images. Sometimes they were photographs, sometimes political cartoons or works of art. For each unit, we developed a similar pattern of looking at images, writing, and raising questions. The information-gathering that followed came from a variety of sources including textbooks, journalistic accounts, documentary films, and works of historical fiction.

As we moved forward in this work together, Mary gradually took over the lead role. By January she and I were still discussing her lessons, but she

did most of the planning and almost all of the teaching. Her research questions became refined as she realized the essential role that writing was playing in the students' engagement and understanding. Throughout each unit, we gave the students a variety of informal writing assignments designed to support their inquiry by giving them space to work through misconceptions and confusion, as well as to make connections and voice opinions about historical events. These assignments, which Elbow (1973), Britton (1975), and Fulwiler (1999) call "writing-to-learn," situate writing as "a generative process that creates thought itself." (Britton, p. 23)

### **Margo DelliCarpini: The Middle and Secondary School ESL Classroom**

My own experience with classroom research is similar to what Amanda has described. My classroom practice was with middle and secondary-level English language learners who were considered Students with Interrupted Formal Education. They enter public schools at the grade level their age would indicate, but due to their lack of experience with formal education in their native country are frequently more than three years behind their peers in terms of literacy development, in either their native language or English. When I began my teaching career, these students comprised a small minority of ELLs.

This population is growing: Research has found that as many as 20% of all high school level and 12% of all middle-level English language learners have missed two or more years of formal education since the age of six (Ruiz de Velasco & Fix, 2000). In addition, more than one-third of new ELLs from Latino backgrounds are placed below grade level in school (Jamieson, Curry & Martinez, 2001). Developing advanced literacy skills for such learners is critical. When I was a new teacher, I found little to no research that targeted middle and high school level ELLs who were developing beginning literacy skills in a second language. The reading research at the time focused primarily on monolingual readers and students with reading disabilities. The literature from the field of TESOL focused on adult learners' (usually college level) use of strategies, and most of that research was conducted on students who had high levels of literacy in their native language. I was on my own; I had to develop a set of questions that needed to be answered, and set about answering them in my classroom. These questions first were basic. I had texts in my classroom that included grammar drill books, leveled and abridged readers, and ESL series that focused on life skills and grammar instruction (going to a restaurant, places in the town, etc.). This material

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## How Classroom Research can Improve Literacy Instruction

A strong finding in the research is the importance of phonological awareness to beginning reading in alphabetic languages such as English. But, the question of how to or if one should focus on these foundational skills at the secondary level remains unanswered.

was fine for a supplement, but could not form the basis of a program whose goals were to promote language, content, and literacy development. What materials were appropriate? Based on my own action research I found that in order to be effective I had to provide high-quality literature that was modified to fit these students' needs. For example, I relied heavily on read alouds, which gave students access to literature that was beyond their reading level. This then turned into use of books on tape and CD, and finally to readers' theater activities where students either read pre-written scripts or developed their own scripts based on themes relevant to their own lives. Frequently these student-generated scripts dealt with immigration issues, equity, positioning, and feelings of either isolation or acceptance in their new homes. These literacy activities, born out of research in my classroom on who these students were and what their needs were, helped develop literacy and language in ways that would not have been possible using a set of mass-produced, leveled readers, which are frequently the only available materials at a reading level these students can work with.

Other questions, "How do I focus on letter recognition and letter naming with middle-level students who would be insulted by the use of children's material?" and "Is phonological awareness an important construct for

older ELLs?" were an outgrowth of the first. While these students enjoyed collaborative reading activities, the goal was to develop their skills and make them independent, successful readers. A strong finding in the research is the importance of phonological awareness to beginning reading in alphabetic languages such as English. But, the question of how to or if one should focus on these foundational skills at the secondary level remains unanswered. Through action research I found that students who receive explicit instruction in phonological awareness skills become proficient decoders, which allows them to move on to building comprehension strategies. My students were exposed to 20-to-30-minute blocks of phonological awareness instruction using the whole texts we were focusing on in the classroom. In this way they built the necessary foundational skills in a highly contextualized way. The question that grew out of this action research project was, "Is first-language reading development similar to developing these skills in your second language when you haven't developed them in your native language?" The answer to this question, for my students, was "yes and no." Yes because the same critical foundational skills, exposure to quality material, and opportunities for shared and independent reading were critical to my students' success. No, because secondary-level students have very different needs from children

learning to read, and sensitivity, sheltered classroom learning, and understanding of their interests and level of cognitive development were critical to their success. Again, using prepared material with little attention to these individual questions would have created a “one-sized-all” approach to these students and I fear that their success would not have been as complete.

As these questions were answered, I asked more sophisticated questions, based on my increased knowledge that this action research developed for me in my professional practice. Does phonological awareness in a student’s native language transfer to the second language? How can phonological awareness building activities be integrated in a way that does not reduce reading and literacy to a set of unrelated basic skills that will not be accessible to the learners in context? The answers to these questions helped me to develop a program that focused on a variety of authentic texts while building foundational skills that these students lacked. Seeing the transformation from students who struggled with any reading activity and through this struggle lacked the self-efficacy that is a characteristic of successful readers, to young adults who sought out material, found meaning in a variety of texts, and were able to respond to poetry and literature, transformed my own teaching and my students’ public school experiences.

One particular incident that really highlights the effects of classroom-based research was a project that integrated a non-fiction text, *Women’s Diaries of the Westward Journey* (Schlissel, 1982, 1992), with foundational skills pulled directly from the text (focus on individual letter sounds, rhyming, segmenting words, and substituting sounds in word play). Students had opportunities to hear me read aloud, read on their own, and be supported with diary entries that I put on tape for them. They engaged in diary writing activities, explored connections between their own immigration experiences and the women’s emigrant experiences, and finally wrote letters to these women. Both of these writing projects formed a class anthology. Some of my colleagues initially felt that I was working at a level that was too far above that of most of my students. My action research, however, supports my decisions, as it gave me the answers to my questions relating to appropriate material, adapting texts, supporting reading, how best to build foundational skills in context, and how to partner with my students so that their learning experiences are grounded in relevance and are connected to their own experiences. These students were enjoying reading and becoming active, engaged learners.

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## How Classroom Research can Improve Literacy Instruction

If I had not been able to conduct research in my own program, my career would have taken a very different path and my students would not have benefited from my classroom inquiry.

These stories illustrate the value of action research, which enables teachers to develop understandings about their classroom practices that they can apply to their own teaching as well as sharing with the wider world, including teacher candidates in induction programs who can benefit from studying published accounts of classroom research.

Building on the tradition of action research not only guides classroom practice, it ensures future generations of teachers and teacher educators whose work is guided by the profound practice of studying the work we are doing with children while it is happening. For Anthony Clarke:

The emergence of a vibrant and extensive teacher inquiry literature not only attests to its importance for understanding the complex world of schooling but supports our contention that it is one of the defining features that distinguish teaching as a form of professional practice and not as labour or technical work. (2003)

Working both in professional development and in higher education settings, the goal of teacher educators is to foster reflective practice (Schon, 1983; Henderson, 1996). This is why classroom research is so often encouraged in teacher education programs. Through the empirical study of teaching and learning, teachers can examine pedagogical theories in action. As Henderson says, “If you, as a teacher, are not thoughtful about your professional work, how can you expect your students to be thoughtful about their learning?” (1996, p. vii)

Our work as teacher educators is grounded in a marriage of theory and practice, and rooted in our own experience as classroom researchers, which set each of us on an academic path. This experience enables us to work both individually in the English Education and TESOL programs, and together to help teacher candidates in their respective fields understand ways of working together for the good of all of their students. Classroom research is an essential part of our students’ understanding of how to enact practice that is grounded in theory.

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Through the empirical study of teaching and learning, teachers can examine pedagogical theories in action.



# Literacy Lives at the Virtual Museum

## SUMMARY

The Internet and the availability of free and low-cost desktop publishing software have enhanced literacy opportunities for students by giving them access to museums around the world whose exhibits they can replicate in the classroom. However, even without access to technology, educators can help middle-level students create a classroom museum that will enhance literacy skills for current and future classes.

*Museum openings,* with exhibit banners, student docents, brochures, admission tickets, demonstrations, guest books and souvenirs serve to celebrate completion of a unit study in my middle-level English language arts and social studies classrooms. This act of working together as curators to develop exhibits, demonstrations, and storytelling builds a literacy community. Students develop multiple reading skills as they research content of the exhibit — for example, a Karen Hesse author study, or a rites of passage theme. They create actual informative reports, functional writings (museum surveys, quizzes, museum brochures) and persuasive visual formats (posters).

While I provide my students with this opportunity to literally “exhibit” content mastery of their unit topic — for example, facts about the author Christopher Paul Curtis or facts about New York City immigration — using accessible, student- and teacher-friendly software and use of free Internet sites have enhanced literacy opportunities for students.

The classroom museum as a closing celebration with community outreach is a memory-making student endeavor. Although the product of the museum project is a multimedia, visual arts-rich exhibition, there are oral language spoken, written, published and interactive literacy opportunities (e.g., docent tours, informational brochures, maps, and readings of exhibit-related books). Beyond think-tank teaming, the museum project can

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**United Federation of Teachers**

be expanded through the use of the Internet, desktop publishing, Excel and Microsoft Publisher — the emerging basics of classroom technology.

**Designing a Middle-Level Literacy Classroom Museum — Without and With Technology**

This vehicle is grounded in the research of Howard Garner (2004), Heidi Hayes Jacobs (1997), Linda D’Acquisto (2006), Ralph Fletcher ([www.ralphfletcher.com](http://www.ralphfletcher.com)) and Carol Hurst ([www.carolhurst.com](http://www.carolhurst.com)). While I started this project based on my personal museum-going as a child, I was not aware of Gardner’s advocacy of the “ways in which the strengths of a museum atmosphere [fosters] apprenticeship learning ...[content] structure, rigor and discipline” (2003).

In addition, Gardner notes “science museums and children’s museums have become the loci for exhibitions, activities and role models that do engage” (2002). Engaged museum community members — student curators, documenters, docents, exhibit builders, poster designers, brochure authors and others — affirm the efficacy of the middle-level curriculum maps developed

under the leadership of Heidi Hayes Jacobs in which six weeks of world communities unit study culminates in a museum experience with multiple literacy products that can be assessed by teacher-developed rubrics. Linda D’Acquisto made an important contribution to the field with her Learning on Display book that includes detailed guidelines for the development of the museum learning on display vehicle as an assessment of teacher literacy learning genre, text, and content objectives with built-in student peer literacy skills and content mastery assessments plus authentic adult and peer feedback (2006). Carol Hurst’s seminal work in literacy includes a downloadable chapter — Living History Museum — which is part of her work with Rebecca Otis on integrating U.S. history with literature. This chapter details spoken, written, responsive, critical, and analytic ways in which research of U.S. history content at the middle level can be dovetailed with literacy skills as part of students “becoming”/impersonating historic characters in a “living history museum.” In his online “Tips for Teachers,” Ralph Fletcher also suggests that students write about artifacts.

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Students need to have some idea of what a museum is, why people create museums and why many people enjoy going to museums — not only as part of school trips.

Through access to the Internet, students can visit as many museums as they want to online. They can view museums related to their units, without leaving their classroom or spending a dime.

Over the three decades and ongoing of my field research using the classroom museum vehicle as a frame for literacy learning, student scores have gone up on standardized social studies vocabulary questions, document-based (illustration, artifact and diagram-referenced) questions and timeline questions.

Within the last five years, classes in which I have explicitly developed document-based questions using two artifacts from the museum displays have done significantly better than peer classes that did not have the museum experience as part of their program. This would indicate that their authentic study of artifacts, illustrations, and diagrams as part of the museum experience improves these test-mandated skills.

### **Step One: Plan the Museum**

Students need to have some idea of what a museum is, why people create museums and why many people enjoy going to museums — not only as part of school trips. This can be accomplished with and without the use of technology.

*Without Technology.* Lead a discussion in which students share their ideas about museums based on past experiences. Read aloud or focus students' attention on a non-fiction or fiction book about an actual famous museum, particularly when students

do not live near accessible museums or come from museum-going families. For students to create their own model of an actual cultural organization not personally experienced represents a challenge; anticipating an adult audience visiting classroom exhibits at the museum presents another challenge. Anticipating family and local community as audience helps students write, speak, communicate and create classroom museums. Classroom museums authenticate English language arts standards.

*With Technology.* Through access to the Internet, students can visit as many museums as they want to online. They can view museums related to their units, without leaving their classroom or spending a dime. Three museums in New York City that offer online tours and plenty of resources include the Children's Museum of Manhattan ([www.cmom.org/](http://www.cmom.org/)), the New York Historical Society ([www.nyhistory.org/web/](http://www.nyhistory.org/web/)) and the Museum of the City of New York ([www.mcny.org/](http://www.mcny.org/)).

Identify online experiences offered by the museum, activities or links for the students to review. Provide the students with time and opportunity for a directed cybervisit to the exhibit.

If a particular class comprises students who have learned to conduct online searches and evaluations using a

teacher-designed or student-designed rubric, leave the identification of appropriate museums to the students, making it even more investigatory, critical and analytic reading-centered — and student-owned. Even if the teacher does the preliminary perusal of sites and site activities, students will have to engage in a tremendous amount of functional and informational reading and writing as they visit their museums. They need to evaluate how useful the sites are in terms of print information, public domain images and accessibility for demonstrating and sharing specific features of them with an adult or peer small group audience in 8 to 10 minutes. Students experience streaming videos, interactive graphics, shifting screens and online interactive/collaborative writing and reading opportunities offered by many museums.

Neighborhood and international museum-going students can expand their explorations of multiple world-class museums from their classroom. The Internet levels the cultural resources inequity through museum URLs. Urban students who may live near museums rarely have time to visit many accessible local cultural sites unless their families are museum-goers. Through the use of online sources the cultural awareness of all students — including those from small towns or rural isolated communities — is broadened.

One of my former students from 10 years ago stopped me on the street to tell me he had finally seen the San Francisco Exploratorium ([www.exploratorium.edu/](http://www.exploratorium.edu/)) after we toured it online for a Leonardo da Vinci Project. Students from Syracuse, whom I visited during a residency on a Langston Hughes exhibit, were able to access the riches of the Schomberg collection and the Studio Museum of Harlem ([www.studiomuseuminharlem.org/](http://www.studiomuseuminharlem.org/)) online, where they also encountered artist Kerry Marshall. They had never heard of either the museum or Marshall before they did the searches and checked out the sites. As a teacher, I would rather have the Louvre museum ([www.louvre.fr/llv/commun/home.jsp?bmLocale=en](http://www.louvre.fr/llv/commun/home.jsp?bmLocale=en)) or Tate Collection ([www.tate.org.uk/collection/](http://www.tate.org.uk/collection/)) online, than wait to raise money to take my class or myself there to research the French Revolution or Ann Boleyn.

Beyond broadening students' ability to develop a potential laundry list of objects and stories-descriptive narratives for the unit museum, the fact that the students have been part of an online audience for a variety of distanced and local museums “expands” their definition of visitors to their classroom museum.

As a teacher, I would rather have the Louvre museum or Tate Collection online, than wait to raise money to take my class or myself there to research the French Revolution or Ann Boleyn.

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Museums, with or without technology, offer middle-level students the opportunity to participate in authentic, multiple audience-validating literacy experiences whose magic will linger.

### Step Two: Building the Collection

*Without Technology.* Have the students review unit texts, printed materials or experiences, then ask them to compile a list of objects for their exhibit. They chart who would be responsible for getting a particular object and create a timeline for the museum.

*With Technology.* Students can access the sites they visited, create an Excel chart (or registry of objects), and an Excel schedule of roles and responsibilities. The registrar can maintain online contact with students to monitor progress in building the collection. Entries for a collection catalog can be assembled as a Word file.

### Step Three: Creating the Museum

*Without Technology.* Students draw their space and develop maps to transform the classroom into a gallery. They hand-letter all signs, brochures, posters, and directions. They fold, post, and photocopy brochures, fliers, and feedback forms on the school copier or use an outside color copier if funds are available.

*With Technology.* Posters, signs, and graphics can be done with MS Publisher or Print Artist. Images that are public domain can be scanned

into these documents, as could digital photographs of the museum in progress. With a laser printer, sufficient color cartridges and glossy paper, high-quality brochures, posters, signs, fliers and other museum announcements can be easily printed in necessary quantities. If the school does not have a laser printer and sufficient paper for the printed signs and other museum materials, the prototypes become part of set classroom museum documents to reference next year.

With access to podcast/MP3 recording capacities, students can record a podcast, interviewing collection donors, chronicling exhibit history, or interviewing adult curators. These experts can be from world-class museums that specialize in particular collections, or distanced museums. MP3 recordings can provide appropriate period, popular, or student-composed music to be wafted through the exhibit. This actual museum technique adds an aural dimension to the museum experience. Students can record museum exhibit tour guides' tapes on audio-cassettes, so museum visitors can do self-guided tours.

#### **Step Four-Working the Museum**

*Without Technology.* Museums have greeters who welcome guests to the museum. Their remarks are scripted and practiced. The student docents, or tour guides, compose their own scripts so they have step-by-step procedural narratives to guide the museum visitors through the exhibit within 10 to 15 minutes. They may need to deviate from this script to respond to questions from the guests.

The demonstrators or storytellers also work from a script, which details the step-by-step procedures in their “make-it-and-take-it demonstration” (i.e., Tiffany glass design using plastic tiles), or related print book reading (i.e., what illustrations to ask questions about, where to pause for the audience to provide ending rhymes or fill in missing words). These scripts are developed by student demonstrators and storytellers and rehearsed prior to the opening.

Some students opt to be journalist documenters of the museum-building process. Their reports are included in the brochure or catalog or as part of the exhibit.

*With Technology.* The material above can be facilitated, preserved, and transferred by using the most accessible Microsoft Word documents,

digital photography, PowerPoint presentations, and Ms. Publisher tools, which are increasingly accessible and familiar to students. Use of KidsSpiration ([www.inspiration.com/](http://www.inspiration.com/)) can enhance documentation as well as engage students in using necessary graphic organizers that will enrich their research reporting capabilities.

Creating docs, JPEGs, PowerPoints, and other files ensures that the teacher and the young curators have documents that can be used as a modifiable template for future students.

#### **Step Five: Optional Followup**

*Without Technology.* Students may create the guestbook, photos from the museum, and the many scripts (e.g., tour guides and visitor feedback forms) and document the experiences of the event through a beautiful scrapbook or poster. They may detail it in a school newsletter, write an article for the student newspaper, or keep a reflective journal. Artifacts from the collection can be photographed for the next class.

*With Technology.* If students have learned Dreamweaver, Flash, or Front Page, they can expand the capacity for accessibility of the exhibit for a broad audience of Internet users, or potential school admissions when they apply for a high school or college.

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## Conclusion

Museums in the classroom, with or without technology, offer middle-level students the opportunity to participate in authentic, multiple audience-validating literacy experiences whose magic will linger. With technology, that experience can be accessed again by students, families, the teacher, and general audiences. Technology does offer multiple dimensions to enhance the literacy validity magic of museums.

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## RESOURCES:

### **Resource Central — Museum Resources Worldwide**

[www.resourcehelp.com/qsermuseum.htm](http://www.resourcehelp.com/qsermuseum.htm)

This search engine offers links to a number of themed museums that will correlate to mandated curricula. Check out the San Diego Aerospace Museum for the history of military and civil aircraft. To infuse community service or teach civic responsibility, visit the American Red Cross link on this site. If you use cryptograms to teach puzzle solving, mathematics literacy and higher order thinking skills, you will find the National Cryptologic Museum a rich resource.

### **Great Museums: Virtual Tour**

[www.greatmuseums.org/virtual\\_museums.html](http://www.greatmuseums.org/virtual_museums.html)

To help docents design museum tours or to show visitors around relevant sites.

### **Going to a Museum?**

#### **Resources for Educators**

[www.fraziermuseum.org/pdf/educationalresource2.pdf](http://www.fraziermuseum.org/pdf/educationalresource2.pdf)

This guide and step-by-step planner is a course itself in the use of museums for content and investigatory collaborative learning. Middle-level student curators will find it an excellent resource.

### **National Gallery of Art School Tours**

[www.nga.gov/education/school.htm](http://www.nga.gov/education/school.htm)

This site has grade- and age-appropriate topics for your unit museum. It has sample questions, teaching materials and models, plus templates for student-centered feedback forms that students can modify. Among themes explored are: weather in art, portraits and personalities, global awareness, and lateral problem-solving. The site has a downloadable guide for its The Art of Romare Bearden (2003) exhibit.

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FOR FURTHER PRINT RESOURCES AND SUPPORT:

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# It's Time to Tap in to Technology

## SUMMARY

The use of technology to support and develop literacy skills at the middle level is no longer an option, it's a requirement for student success in the 21st century. In this article, the authors outline some of the technology available and provide strategies and resources for immediate use at the middle level.

*Often, middle-level* teachers stand at the front of the classroom and present a literature lesson by asking students to read specific parts of the text and then requesting that they answer several questions that are written on the blackboard. Students copy the notes into their notebooks. The format of the lesson is usually the same each day and students are expected to regurgitate correct answers throughout the year. This passive lesson could be more engaging and motivating through interactivity available via technology. The use of technology to support and develop literacy skills in our classes is no longer an option, but is a requirement for student success in the 21st century.

Recently, researchers have claimed that nearly 20 percent of middle-level students experience problems when learning to read. (Combs, 2003; Moats, 1999) Therefore, teachers must embrace the limitless opportunities to creatively utilize technologies to teach reading, writing, listening, and speaking skills, so that all children can be successful and enthusiastic literacy learners. Developing strategies for increasing the use of technology within the curriculum as it supports literacy-based teaching and engaging learning experiences enables students and teachers at all grade levels to creatively motivate students toward success in literacy development.

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**Gloria Wolpert, Ed.D., Manhattan College**  
**Lisa Anne Vacca-Rizopoulos, Ph.D.**

### **Rationale**

Literacy practices are rapidly changing from print-based and linear to multimodal and digital (Flint, 2008). Computers offer unique instructional capabilities for literacy learning and are a functional necessity that should be used concomitantly with each other. The two are synergetic in that each enhances and complements the other's strength to teach a child to become literate. In order to successfully prepare students for the workplace and to prepare students in the future to be productive members of society, technology is used to revitalize reading instruction and make reading more relevant to the lives of students immersed in the new technologies. The use of the Internet is the way today's students engage in learning, both in and out of school, by looking for information, blogging, connecting globally and crafting class presentations that reflect multimedia. For teachers, expanding these opportunities is critical (McCloskey, 2006).

Technology needs to be infused into the literacy curriculum because technology supports authentic reading and writing activities by allowing

students to research and problem-solve with a multitude of current resources and a variety of services. Computers are creating new, exciting opportunities for collaborations with peers from the same school and from across the world, simultaneously and instantly (Hartley, 2001; Azevedo, 2005). Technology for literacy learning uses multisensory, motivational, social, and interactive tools that immerse students in literacy-based interactions that are dynamic and filled with infinite opportunities for learning (Ko & Rossin, 2004). The use of technology enhances student motivation and fosters self-discipline, which has been linked to academic achievement of eighth-graders in an inner city charter school (Duckworth & Seligman, 2005).

### **Supporting Reading Skills with Computers**

At the middle level, many parents and teachers feel that students are too old to be read to by the teacher. On the contrary, fluent, modeled reading helps students recognize the proper expression and speed text should be read with. During read alouds and

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Computers are creating new, exciting opportunities for collaborations with peers from the same school and from across the world, simultaneously and instantly.

A caution about using PowerPoint is that sometimes students forget it is a visual enhancement of ideas, and many presenters erroneously stand up and read the text of the slides.

paired reading, students are exposed to vocabulary that may be beyond their independent reading level in order to improve their own literacy skills. This is the time when e-books can be used to encourage alliterate, reluctant readers to become involved in a story and to reread, at their own pace, selections of the reading. Teachers and parents can visit the Wired for Youth Center at [www.wiredforyouth.com/books/index.cfm?booklist=audio](http://www.wiredforyouth.com/books/index.cfm?booklist=audio) where students can read books of high interest with teen themes. This resource is also important because many schools do not have enough financial resources to purchase books for their students.

The following Internet sites and activities can be used without cost to the student or the school, thus expanding the classroom library connection. Free e-books can be found at the BartlebyWeb site at [www.bartleby.com](http://www.bartleby.com). Audiobooks can be especially useful for students who do not speak English as a first language. Students can access thousands of free texts in more than 50 languages that they can download to their computer. Other sites that offer free audio resources with adolescent themes are [www.audiobooksforfree.com/screen\\_main.asp](http://www.audiobooksforfree.com/screen_main.asp), [www.Ereader.com](http://www.Ereader.com), and the Digital Book Index, [www.digitalbookindex.org](http://www.digitalbookindex.org). Students can complete a listening guide that

assesses their comprehension by filling in a chart outlining story elements or by completing a graphic organizer.

### Software and Other Media

Electronic texts are not fixed in print but can be updated by the publisher or interactively modified depending on student responses on the classroom computer. Multimedia software is available in all content areas. Examples are “Afternoon” for children’s literature, “Multimedia Math” for a language-based math program, and “Chemedia” for chemistry. Many programs and Internet sites include a feature that allows dialogue to be read or performed expressively by professional voice actors, making the listening process more enjoyable than just electronic voices.

Use of computer-based educational software leads to questions that teachers need to ask themselves about the hardware capabilities of the computers at their school. Will the delivery system be a single computer or computers attached to a local area network, or the Internet itself? Is the speed or the memory capability of the network sufficient to run the software or multimedia that the teacher selects? When choosing software, does the program offer technical assistance, future updates, upgrades and licensing agreements? In what ways can use of the software enhance teacher pedagogy or student learning?

Today's teachers and administrators need to be savvy consumers when it comes to purchasing hardware and software.

Use of PowerPoint is an effective way for students to enhance oral presentations or compensate for expressive language difficulties. Microsoft PowerPoint provides visual support for speakers to separate their main ideas from supporting details during a presentation. It is also a visual bridge for memory during oral presentations. The software allows students to generate ideas in the form of an outline that can be presented in a layout as slides. A slide sorter feature allows a presenter to move slides around and graphics can be added for aesthetic purposes. A caution about using PowerPoint is that sometimes students forget it is a visual enhancement of ideas, and many presenters erroneously stand up and read the text of the slides, which is not motivating to the listener.

Many teachers today use the interactive SMART Board at the middle level to help energize presentations and motivate students. Created in 1991, it was the world's first interactive whiteboard. Today it is the world's leading interactive whiteboard, combining the simplicity of using a whiteboard with the powerful resource of a computer. The SMART Board interactive whiteboard has the

flexibility to engage all learning styles:

Visual learners can easily see colorful, movable images and diagrams.

Auditory learners can be immersed in a complete multimedia experience using optional USB speakers or SMART Audio.

Kinesthetic learners can interact and explore by moving letters, numbers, words and pictures with the touch of a finger.

The touch-sensitive display is a favorite feature with students, and connects to a computer and digital projector to show a computer image. Computer applications can be controlled directly from the display, and notes can be written in digital ink and saved to share later. SMART Solutions is a feature that allows upgrades, and there is a database of lesson plans to choose from, on every level.

Podcasting is another technological tool that can be adapted to enhance education of middle-level students. Podcasting lets students listen any time, anywhere, to favorite audio or video syndicated shows via the Internet. For example, students can access radio station *WOR710.com* and click on any Listen Now button to hear a show or interview through the computer. At this site, students can access the Laura Ingraham show

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## METHODOLOGY

### Radio:

Radio shows are a good resource to develop students' interactive literacy skills. As the name implies, Radio Free World ([www.radiofreeworld.com/page14.html](http://www.radiofreeworld.com/page14.html)) features free radio programs from around the world. Students learning about current events can access Larry King's radio show. On this site, listeners can download transcripts of shows of interest that have been archived since the year 2000. Students are encouraged to e-mail suggestions for future topics for the show and send comments and questions for the *Larry King Show*. This is just one of the options available on this extensive audio site that includes famous speeches from history, different genres of music, and online television shows.

## It's Time to Tap in to Technology

A text-to-speech screen reader converts electronic text into spoken words.

This allows inefficient readers to process text-based information both visually and aurally, which greatly assists comprehension. This may in turn improve concentration and attention span for some students, leading to better academic achievement.

to listen to opinions and discussions about the world of politics and current events. A followup activity might be to actually call in and view your political opinions to other listeners.

Students can have their own debates, based on information they learned on the show, articulating their position for or against a specific topic. If the class subscribes as a listener, the shows will automatically be synched to every student's MP3 player (including an iPod) each time he or she docks it. Teachers can record lectures on podcasts, so students can easily and automatically download audio files to hear at a later time (Richardson, 2006).

For our middle-level students to succeed in the 21st century, they must learn how to find information and then know how to use it. Webquests are one activity that requires higher order thinking skills and emphasizes the students' ability to first locate information quickly and then use this information to construct unique products. Webquests are student-centered, inquiry-based missions designed to explore the Web to find answers to higher level thinking problems by searching out information effectively, critically evaluating what they discover, and then applying or adapting what they've learned.

During Webquests, students are exposed to materials, people, activities and ideas that are not found in a standard textbook or a typical classroom. Webquests usually have the following parts: (a) an introduction, (b) a process, (c) a task, (d) a list of resources, (e) a conclusion, and (f) an evaluation. Middle-level students find these quests compelling, because they are interacting with a variety of online resources that may include primary documents, virtual tours, online music, diary entries, animation, sound, newspaper articles and poetry.

For example, at the middle level, *The Diary of Anne Frank* is one of the books typically assigned to students. By visiting [http://www.backflip.com/xtour/public\\_set.ihtml?title=Anne%20Frank&src=/members/mblanos/14155251/ptp%3D1&refID=pf](http://www.backflip.com/xtour/public_set.ihtml?title=Anne%20Frank&src=/members/mblanos/14155251/ptp%3D1&refID=pf), students can learn about Anne Frank's life by investigating an array of literary documents. Students can be asked to first use the links to glean information, then apply what they've learned using different activities. Specifically, on the Anne Frank site, students are asked to first learn about Miep Gies, one of the Dutch citizens who hid Anne Frank and her family from the Nazis. Then they create an original acrostic poem based on the information they just learned. Another creative and interactive activity on this site includes using

visual literacy, or pictures, to create a floor plan of Anne Frank's house. What is unique about Webquests is that they touch on students' multiple intelligences and allow them to work at their own pace. This can be especially useful to differentiate instruction, because students require different amounts of time to complete assignments. Webquests can be completed in groups or individually.

Today's media companies offer global access to content and learning systems that the educator can take advantage of. Two examples are Thinkfinity by Verizon/Marco Polo and Google Moodle. Thinkfinity (1997) is a search engine that relates K-12 curriculum globally and offers free lesson plans, interactive games, content resources, parent resources and homework help through an after-school Web site. A teacher index offers free training, suggestions and grants for programs ([www.thinkfinity.org](http://www.thinkfinity.org)). Google Moodle is an open e-learning platform built inside the Google information system. Teachers can create tutorials by choosing a learning management option and downloading content into it. Student grants are offered for summer study with professionals as potential mentors (Google, 2007). Both of these systems have encouraged a worldwide network of edubloggers discussing content, ideas and cognitive skills (Provenzo, 2005).

### Assistive Technology

Assistive technology has made great advances in the domain of reading ability. Reading pens are portable, mini-dictionaries shaped like a pen, with voice options that can scan words (in reverse order or backward), recite words orally, and with a click of a button, give the definition of the word, its derivation, synonyms and antonyms, or use it in another sentence.

A text-to-speech screen reader converts electronic text into spoken words. This allows inefficient readers to process text-based information both visually and aurally, which greatly assists comprehension. This may in turn improve concentration and attention span for some students, leading to better academic achievement (Zimmerman, 2001).

### Conclusion

Technology provides opportunities in literacy instruction to improve learning for all students by providing knowledge and experiences that would otherwise not be available to them. Ultimately, the teacher makes the decision about how technology can be most effectively integrated into the curriculum to support instructional outcomes and promote positive literacy learning across the content areas and grade levels.

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## METHODOLOGY

### Resources:

**Freeware** - free software - can be downloaded from the Internet without charge or fee. Examples are:

HearIt  
[www.tucows.com/preview/205274](http://www.tucows.com/preview/205274)

HELP read  
[www.pixi.com/~reader1/allbrowser](http://www.pixi.com/~reader1/allbrowser)

Web Talkster  
[www.code-it.com/catalog.htm](http://www.code-it.com/catalog.htm)

Adobe eBook Reader  
[www.adobe.com/products/ebookreader/main.html](http://www.adobe.com/products/ebookreader/main.html)

Microsoft Reader Software  
[www.microsoft.com/reader](http://www.microsoft.com/reader)

Two main commercial software packages convert the visual to aural: Kurzweil 3000 and CASTereader/CAST.

These are highly recommended for students in the upper grades, so they can bypass reading decoding difficulties and benefit from literature and other more advanced genres.

Teachers should be aware of the multiple literacies that students bring with them and support literacy practices in the classroom setting. Consideration must be given to how technology can most effectively be integrated into the curriculum to create dynamic literacy learning environments for the next generation of 21st-century learners. Middle-level students use technology in a variety of ways related to their learning both in and outside of the school setting. Windham (2005) and Borland (2006) have described these students as the “net generation,” citing “Father Google” and “Mother IM” to represent this generation’s affiliation and dependence on the Internet and technology.

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# Reaching Diverse Learners Through Social Justice Themes

## SUMMARY

A curricular framework that provides techniques for teachers to combine content about labor and social justice with technology for digital storytelling is giving culturally and linguistically diverse learners new opportunities to participate in personally meaningful activities that incorporate multiple literacies, and become successful critical readers and writers.

*It is* well-established that low socioeconomic status has major implications for student success. Poor and working-class students are more likely to be in schools in which restricted school literacy (Miller & Borowicz, 2007) is the preferred mode of instruction, with their limited conceptions of literacy learning, print bias, a dominant practice of chalk and talk, under rigorous testing mandates. In many classrooms, students' cultural and family "funds of knowledge" are not recognized or valued (González, Moll, & Amanti, 2004). A report by Rosen and Ortego

(1969) indicated that inexperienced teachers with unawareness of cultural biases and language acquisition are frequently responsible for attitudes that denigrate immigrant and migrant workers' rich and varied life experiences. As teacher-educators, literacy professionals and educational leaders, we are most concerned with reaching all students with relevant and socially useful skills and information. Lack of knowledge or injustice cannot be perpetuated as it impedes students from modes of learning that will empower them as they grow up.

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*Organizing the Curriculum* (OtC), (Linné, Benin & Sosin, 2009, 2006) counters the absence of labor-related classroom resources with suggestions and techniques about America's history of labor activism, particularly directed toward meeting the needs of working-class students (Finn, 1999). OtC provides an overall curricular framework that guides teachers in the selection of content resources and literacy materials about labor and social justice. One aspect of OtC concentrates on professional development opportunities to support and extend the learning of content and repertoire of literacy strategies that help students connect and succeed in reading and writing. Our current textbook-based educational system does not provide teachers and students access to themed materials that highlight workers' lives and labor's stories (Loewen,

1995; Zinn, 1999). OtC supports efforts by unionists, teachers, administrators and families to connect labor consciousness and social justice in the minds of students (Freire, 1970).

The concepts promulgated in OtC have blossomed into a grassroots organization, the Education and Labor Collaborative ([www.organizingthecurriculum.org/aboutus.aspx](http://www.organizingthecurriculum.org/aboutus.aspx)), made up of like-minded educators and unionists. Developing collaborations between educators and labor unionists offers new avenues for educational transformation in the interests of working-class families and their children, particularly those who are culturally and linguistically diverse, to participate in literacy communities so that they achieve success as readers and writers.

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Developing collaborations between educators and labor unionists offers new avenues for educational transformation in the interests of working-class families and their children, particularly those who are culturally and linguistically diverse, to participate in literacy communities so that they achieve success as readers and writers.

## Content and Literacy

We strongly rely on the comprehension model outlined by Keene & Zimmermann's *Mosaic of Thought* (1997). Research-based best practices for literacy instruction originate and are adapted from Daniels & Bizar's *Methods that Work: Six Structures for Best Practice Classrooms* (1998) and Harvey & Goudvis' *Strategies that Work* (2000). OtC incorporates content about labor and working people's concerns with strategic literacy instructional techniques, including guided reading, shared reading, teacher read aloud, independent reading, literature circles, individualized reading, and reader's and writer's workshops.

Biographies of Cesar Chavez, picture books, children's and young adult literature and media about farm workers and immigration from Mexico are touchstone texts for a unit that integrates social justice content for literacy instruction. Biographies about Chavez, an archetypal labor leader, were selected because Chavez's life story resonates with immigrant and working-class students, who may have found themselves in similar situations and because many biographies of Chavez have been written at various levels of readability difficulty, ranging from early elementary grades through high school. Such materials have potential for engaging students across

grade levels in learning about the lives and struggles of immigrant workers both in the past and present, how they met their challenges and found solutions through organized action. See this article's appendix for a list of the recommended books.

A new social culture of electronic communication uses innovative technology tools that enable culturally and linguistically diverse learners to organize and make meaning from experiences, interpret cultural and personal impressions, and represent and share what they know in ways they find meaningful. Acknowledging students' multiple literacies (Harste, 2003; Luke & Elkins, 2000; New London Group, 1996) offers a way of moving toward a more socially just pedagogy, as it empowers students to express their ideas in alternative media.

*Digital Storytelling incorporates the use of technology and media to express personal narratives.* Digital stories usually rely upon images, audio (voice and/or music) or video that may be embellished with text. As with conventional storytelling, digital stories often reflect the creator's individual point of view. Digital stories can provide the medium for meaningful expressions of people's lives (Lambert, 2003; 2002). Readers and writers who create digital stories become aware of

alternative and multiple literacies, apply critical and higher-order thinking skills, use media for expression, organize materials, produce a coherent product and learn to take advantage of technologies they previously did not use (Figg, Ward & Guillory, 2006). In addition, digital storytelling offers an engaging way for the story maker to acquire technology competencies. Digital Storytelling can be an effective technique for engaging students in a motivating self-expressive process, and has potential for inviting reluctant readers to make personal connections (Behmer, Schmidt & Schmidt, 2006; Kajder, 2006). For models incorporating technology into literacy, explanation of the concept of multiple literacies, and particularly the instructional value of digital storytelling that provides alternative ways to express personal thoughts and ideas creatively with computers, animation, digital cameras, video recorders and software, we refer to the Center for Digital Storytelling (2007), along with BRIDGES to Understanding, (2005) Leu & Kinzer's work on literacy and technology, (2000) and our own work with Digital Storytelling (Sosin, Pepper-Sanello, Eichenholtz, Buttarro, & Edwards, 2007).

### **Action Research**

In an action research study (Merriam, 1998; Mills, 2003) that took place during a professional development project at a South Bronx elementary school, the university professor introduced the principal to OtC's concepts and literature selections. The principal adopted the touchstone texts, and eight teachers developed units of study for their culturally and linguistically diverse students.

During lunch and preparation periods, as well as after school, the group shared their expertise in reading and writing instructional best practices and implemented digital storytelling as means for their mostly immigrant, English language learning students to express ideas and thoughts. Using the touchstone texts, the teachers communicated about social justice concepts and collaboratively created meaningful classroom learning experiences that gave students the opportunity to use technology to express their ideas. The following statements are selected from teachers' reflections of their learning experiences as they implemented their literacy instructional classroom programs.

We have thematically arranged the teachers' remarks into categories based on implementation of grounded theory and constant comparative analysis to extract themes from data (Glaser & Strauss, 1967).

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Readers and writers who create digital stories become aware of alternative and multiple literacies, apply critical and higher-order thinking skills, use media for expression, organize materials, produce a coherent product and learn to take advantage of technologies they previously did not use.

## METHODOLOGY

### Themes of Teacher Awareness

#### Voice/Empathy

“After I read these books, I became aware of something very powerful. I saw my students in a different light. I thought I had an idea. I realized I did not know enough.”

“As I started asking my students about their experiences, I noticed that they were not far removed from what Chavez went through. My students in the Bronx have amazing stories, sad ones, horrifying ones, but amazing nevertheless.”

#### Cultural connections

“The books have brought a level of awareness. When the family moves and they pack their boxes with their belongings, it’s something everyone can relate to. We all moved from ‘here to there’ - *de aqui hacia alla*.”

“With digital poetry, the kids got to use all their languages — Spanish, English and a few African tongues as well. These kids ‘owned’ the project.”

“The kids got to see English and Spanish. *Voices from the Fields* has poems in both languages. Now kids feel comfortable with code switching; they don’t see it as doing something wrong.”

#### Multiple literacies

“I feel more comfortable now that I can use technology in the classroom. Everybody gets involved and there is no room for boredom.”

## Conclusions

*Organizing the Curriculum* provides curricular direction to integrate literacy and language arts with content-area instruction using children’s and young adult literature and new technologies. Culturally and linguistically diverse learners have opportunities to relate to key characters in biographies and stories set in historical and present-day contexts. The content opens consideration of labor while a standards-based instructional program in listening, speaking, reading, writing, and viewing is implemented. In this way, a focus on labor, work, social class, and immigrant experiences is connected with foundational literacy strategy instruction in a process of making learning personally meaningful.

In the action research study, the teachers’ comments and reflections quoted herein make it apparent that appropriate resources and materials, combined with literacy and technology instruction, develop and support critical awareness and social justice learning. The introduction of motivating content, new literacies, and new technologies, empower teachers to reflect upon effective literacy teaching practices for immigrant students who may not otherwise be exposed to positive school learning experiences.

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Biographies of Cesar Chavez, picture books, children's and young adult literature and media about farm workers and immigration from Mexico are touchstone texts for a unit that integrates social justice content for literacy instruction.

- Miller, S.M. & Borowicz, S. (2007). New literacies with an attitude: Transformative teacher education through digital video learning tools. In P.J. Finn & M.E. Finn, (Eds.) *Teacher education with an attitude: Preparing teachers to educate working-class students in their collective self-interest*. Albany, NY: State University of New York Press.
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## APPENDIX

### **Biographies of Cesar Chavez:**

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- Cesar Chavez: A Triumph of Spirit*. Richard Griswold del Castillo & Richard A. Garcia. 1995. Norman: University of Oklahoma Press.
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- The Moral Vision of Cesar Chavez*. Frederick John Dalton. 2003. NY: Orbis Books.
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**Suggestions for teaching upper elementary through secondary students about migrant farm work and Mexican immigration:**

*A Day's Work.* Eve Bunting. 1994. NY. Clarion Books, Houghton Mifflin.

*Esperanza Rising.* Pam Muñoz Ryan. 2000. New York: Scholastic Press.

*First Day in Grapes.* L. King Pérez. 2002. NY: Lee & Low Press.

*Hairs - Pelitos: A story in English and Spanish from The House on Mango Street.* Sandra Cisneros. 1994. NY. Dragonfly Books, Alfred A. Knopf.

*My diary from here to there.* Amanda Irma Perez. 2002. San Francisco: Children's Book Press.

*The Circuit: Stories from the life of a migrant child.* Francisco Jimenez. 1997. Albuquerque: University of New Mexico Press.

*Voices from the Fields: Children of Migrant Farmworkers Tell their Stories.* Interviews & photographs by S. Beth Atkin. 1993. NY. Little, Brown & Co.



# Meet Your New “Reading First” Students

Dear Colleagues:

Did you know that more than 78,000 students in K-3 classrooms in our state have taken part in a new approach for the teaching and learning of literacy? Since 2001, in more than 308 New York state schools, 10,000 teachers have adopted the principles of reading instruction that were part of Reading First, the cornerstone of the No Child Left Behind Act. The student impact is even wider than this because many non-Reading First schools have adopted some of the instructional and organizational strategies and shared the professional development that are key components of Reading First.

These students are now in grades 3-8. As middle-level school children throughout the state crossed over the classroom threshold in September,

they may have looked the same but something was distinctly different. Many of them have spent up to the last five years working with their teachers through the educational rigors of the Reading First Program. These children are different from previous middle-level students. You have the opportunity to build on the successful components and approaches that are at the heart of Reading First instruction. If you are not aware of these differences you might underestimate the skills your students have acquired. Without that understanding, you — as colleagues of early literacy instruction and middle-level instruction — would likely be at a disadvantage. Having a conversation at this point will prove enlightening. It could set the stage for uninterrupted, successful learning for both teachers and students.

*Anne Genovese, who retired in 2008, taught grades 3-6 in Central Islip schools for 36 years and worked as a reading specialist and Reading First literacy coach. Carol Pufahl is an administrator for ELA K-12 in Central Islip. Roberta Senzer is Reading First coordinator, Long Island Regional School Support Center.*



**Anne Genovese, Central Islip Teachers Association**

**Carol Pufahl, Central Islip administrator for ELA, K-12**

**Roberta Senzer, Reading First coordinator,  
Long Island Regional School Support Center**

### **What is Reading First?**

Reading First, a national early literacy initiative, is a key component of NCLB. It is funded by competitive three-year grants that support early literacy programs from kindergarten to grade 3 in schools at greatest risk of student failure. Like most initiatives that undergo widespread implementation, Reading First has received some tough criticism. While it has been controversial on a national level, many districts in New York have enjoyed much success with it. Buildings receiving Reading First grants are subject to the following:

All K-3 teachers and special education teachers must participate in an online professional development program known as the New York State Reading Academy.

Participating districts must use grant monies to provide full-time building literacy coaches, with the number based on the number of teachers per building. The role of the literacy coach is to support the teachers as they practice skills learned in Reading Academy professional development. Coaches model lessons, help the teacher assess student performance, and

facilitate regular building literacy meetings.

Districts must give the required assessments and report their findings. These include diagnostic tests, progress monitoring, and year-end data. Some districts use grant money to hire Reading First data coordinators. The expectation is that the findings would give teachers a clear picture of where their students are and how instruction could be modified to meet their diverse needs.

Districts and buildings use a core reading program that meets the requirements of scientifically based reading research.

Supplemental materials purchased to enhance instruction must meet the same rigors.

The core curriculum must include explicit instruction practices in the “Big 5” — phonemic awareness, phonics, vocabulary, comprehension, and fluency. A 90-minute, uninterrupted reading block is required for smooth implementation of this extensive literacy instruction.

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## **METHODOLOGY**

**For more  
information on  
Reading First in  
New York state:**

NY Reading First:  
[NYSRRC @ monroe.edu](mailto:NYSRRC@monroe.edu)

NY State Reading Academy  
[www.readingacademy.  
monroe.edu/](http://www.readingacademy.monroe.edu/)

State Education Department  
[www.emsc.nysed.gov/  
readfirst/](http://www.emsc.nysed.gov/readfirst/)

## Meet Your New “Reading First” Students

### Some points to reflect upon...

Children who have had the experience of being in a Reading First classroom entered your classroom with a variety of experience and skills directly related to the guiding principles of Reading First. Being able to swiftly recognize these behaviors and understandings will put you at a distinct advantage. Let’s briefly discuss some of these.

**Your students have had the benefit of learning in small and large groups.** This might not seem significant but truly it is.

Concepts and strategies have been introduced in large groups and reinforced in small ones. Your students have practiced their learning in small focus groups designed to scaffold them where they are and help them attain grade-level benchmarks.

**Your students have worked cooperatively and independently in learning centers as their previous teachers have worked with small groups.** This classroom procedure fosters student responsibility for their own learning as well as an ability to use time efficiently and effectively. Group meetings that follow small-group work not only hold children accountable for their learning but

challenge them to notice, think, and discover new concepts. Being aware of this can help middle-level teachers move more easily into cooperative learning situations that are more appropriate for this age student.

**Systematic, explicit instruction has been synonymous with Reading First.** Your students are accustomed to this form of instruction. While the degree of explicitness varies with teacher judgment and knowledge of his or her students, this type of instruction becomes more complicated as students move up in age and grade level. “Oftentimes, as anyone working with teenagers knows, being explicit is the perfect way to meet resistance.

One must temper explicit instruction with an understanding of the adolescent learner. Achieving this delicate balance will result in student empowerment. Furthermore, if a student can figure something out for him or herself, explicitly providing the information pre-empts the student’s opportunity to build a sense of agency and independence, which in turn affects the relationship between teacher and student.” (Peter H. Johnston 2004)

**Understanding previous teaching methodologies takes on paramount importance** as middle-level teachers assume the awesome responsibility of shifting their students into more mature learners.

Reading First teachers, using the principles of Reading First, have worked diligently to teach the “Big 5” to your students. They have consistently taught, tested, and reflected on an enormous amount of formative data. They have diagnosed student strengths and weaknesses. Teams of teachers have worked together to provide different tiers of intervention when deemed necessary. Coaches and teachers have explored the meaning of data, working collaboratively.

One organizational requirement of Reading First was the creation of an uninterrupted 90-minute literacy block. Students learned how to shift from instruction to application of skills at learning centers. They used computers, audio equipment, and manipulatives to practice new skills. Learning centers provided meaningful opportunities to differentiate the instruction and engage students in tasks that reinforced and expanded previously taught strategies.

You may have heard that Reading First involved much testing. Indeed, Reading First grants required frequent collection of data about student performance, including diagnostic assessment, progress monitoring, and frequent checks for understanding. We hope that our students now view these short measures and the data collection process as simply a means of monitoring their progress.

Although writing and its direct link to reading and thinking are acknowledged, it has not been deeply embedded within the existing Reading First 90-minute framework. Maturing readers need to understand writing as a tool that takes their reading and thinking to new levels of understanding. We see this as an area for you to build upon.

One criticism of the Reading First program nationally was the focus on the mechanics of reading while not building comprehension skills. New York state’s data is inconclusive about this question. We know comprehension is the purpose of reading; we also know that as students enter the intermediate grades with greater capacity to process and interpret words on a page, they will be able to demonstrate increased understanding.

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## Meet Your New “Reading First” Students

You may wonder, “What about the students who did not succeed in acquiring the basic reading skills?” Reading First programs did include small-group interventions for struggling readers. However, when they reach your classrooms there will still be some students who require additional instruction and support through Academic Intervention Services or Response to Intervention. These are the challenges you will have to deal with as they enter your classroom.

Reading First has had its critics as well as supporters. We do not know what will happen to the No Child Left Behind Act or Early Reading initiatives in the new administration. We do know that over the last six years many of our students learned the basics of reading in a profound way. The results of research-based best practice will become evident in your classroom.

Reading First supports what Giselle Martin-Kniep refers to as a “commitment to expertise.” She strongly supports the premise that “the aim of education should be to enable individuals to learn with and from others. She goes on to say that “... the work

of a professional learning community is to design and distribute thoughtfulness.” (2007) It not only takes on paramount importance for you, middle-level teachers, to have a deep understanding of the kinds of instruction that preceded your students in their middle school experience, it becomes imperative that you do. Our hope is that the work we accomplished these past few years serves as a springboard to begin a dialogue that will sustain the effectiveness of literacy instruction and student achievement. We encourage you to discuss with colleagues in the earlier grades in your school the approaches to reading that your students experienced. In this way, together, we can help our students and our schools improve.

Sincerely,

Anne Genovese

Carol Pufahl

Roberta Senzer

*A Reading First Team on Long Island*

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REFERENCES

Johnston, P. (2004) *Choice words/How our language affects children's learning*. New York: Stenhouse Publishers.

Martin-Kniep, G.O. (2007) *Communities that learn, lead and last/Building and sustaining educational expertise*. New York: John Wiley & Sons, Inc.

# Literacy in the Middle Grades

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## RESOURCES FOR EDUCATORS AND MIDDLE-LEVEL LITERACY PROVIDERS

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### **From the U.S. Department of Education**

(current as of: Nov. 17, 2008)

[www.ed.gov/programs/strivingreaders/resources.html](http://www.ed.gov/programs/strivingreaders/resources.html)

The Institute of Education Sciences, What Works Clearinghouse (WWC) provides resources on identifying, implementing, and evaluating research-based education programs, including:

Identifying and Implementing Educational Practices Supported by Rigorous Evidence: A User Friendly Guide (December 2003)

*The following Web sites include research, reports, articles, and information on reading and adolescent literacy:*

### **Adolescent Literacy Research Network**

[www.ed.gov/about/offices/list/ovae/pi/hs/adollit.html](http://www.ed.gov/about/offices/list/ovae/pi/hs/adollit.html)

A partnership between the U.S. Department of Education and the National Institute of Child Health and Human Development provides funding for multidisciplinary research projects and the development of an Adolescent Literacy Research Network. The research examines cognitive, perceptual, behavioral, and other mechanisms that influence the development of reading and writing abilities during adolescence, as well as the extent to which interventions may narrow or close literacy gaps for adolescents.

### **The Partnership for Reading**

[www.nifl.gov/partnershipforreading/](http://www.nifl.gov/partnershipforreading/)

The Partnership for Reading is a national reading research dissemination project authorized by the No Child Left Behind Act of 2001.

The Partnership for Reading's mission is to make scientifically based reading research more accessible to educators, parents, policymakers, and other interested individuals. The National Institute for Literacy is responsible for carrying out this effort.

### **National Institute for Literacy**

[www.nifl.gov/](http://www.nifl.gov/)

The National Institute for Literacy's activities to strengthen literacy are authorized under the Adult Education and Family Literacy Act in the Workforce Investment Act and the No Child Left Behind Act. The AEFLA directs the institute to provide national leadership regarding literacy, coordinate literacy services and policy, and serve as a national resource for adult education and literacy programs. The NCLB law directs the institute to disseminate information on scientifically based reading research pertaining to children, youth, and adults as well as information about development and implementation of classroom reading programs based on the research.

### **National Assessment of Educational Progress**

<http://www.nces.ed.gov/nationsreportcard/>

Often called "The Nation's Report Card," the National Assessment of Educational Progress is the only nationally representative, continuing assessment of what America's students know and can do in various subject areas, including reading. As a congressionally mandated project of the National Center for Education Statistics within the U.S. Department

of Education, NAEP provides a comprehensive measure of students' learning at critical junctures in their school experience.

### **Alliance for Excellent Education**

[www.all4ed.org/](http://www.all4ed.org/)

The Alliance for Excellent Education is a national policy, research and advocacy organization acting on behalf of at-risk, low-performing secondary school students. The Alliance's Adolescent Literacy Initiative Web site includes news articles, research reports, and other recent information on adolescent literacy. The Alliance's Reading Next Report outlines a vision for action and research in middle and high school literacy.

### **National Governors Association**

[www.nga.org/portal/site/nga/menuitem.b14a675ba7f89cf9e8ebb856a11010a0](http://www.nga.org/portal/site/nga/menuitem.b14a675ba7f89cf9e8ebb856a11010a0)

The National Governors Association's *Reading to Achieve: A Governor's Guide to Adolescent Literacy Report* (2005) examines the literacy crisis facing America. The guide highlights several state-based programs to improve reading achievement, raise high school graduation rates, increase the value of the high school diploma, and close the achievement gap.

### **National Association of State Boards of Education**

[www.nasbe.org/](http://www.nasbe.org/)

NASBE's *Reading at Risk: How States Can Respond to the Crisis in Adolescent Literacy* (2006) provides ideas and strategies to help states develop more effective and comprehensive adolescent-literacy policies.

## **Lists of Favorite Books for Children**

Since 1989, the Teachers' Choices project of the International Reading Association has developed an annual annotated reading list of new books that will encourage young people to read. These are books that kids will enjoy and that contribute to learning across the curriculum. The reading list is available at [www.reading.org/resources/tools/choices\\_teachers.html](http://www.reading.org/resources/tools/choices_teachers.html)

## **Children's Choices List of Titles**

This is a booklist with a twist! Children themselves evaluate the books, and provide reviews of their favorites. Since 1974, Children's Choices have been a trusted source of book recommendations used by teachers, librarians, parents — and children themselves.

[www.reading.org/resources/tools/choices\\_childrens.html](http://www.reading.org/resources/tools/choices_childrens.html)

## Resources

### National Association of Secondary School Principals

[www.principals.org/s\\_nassp/index.asp?CID=1138&DID=54609](http://www.principals.org/s_nassp/index.asp?CID=1138&DID=54609)

NASSP's report, *Creating a Culture of Literacy: A Guide for Middle and High School Principals* (2005), is designed to help school leaders use research on best literacy practices to create a well-defined intervention plan that will improve the literacy and long-range academic success of students.

### New York State Education Department

[www.nysed.gov](http://www.nysed.gov)

*READING NEXT: A Vision for Action and Research in Middle and High School Literacy*

Reading Next is a cutting-edge report to the Carnegie Corporation of New York and published by the Alliance for Excellent Education. It combines the best research currently available with well-crafted strategies for turning that research into practice. Reading Next charts an immediate route to improving adolescent literacy, including suggestions for instructional and infrastructure improvements.

The authors outline 15 key elements of an effective literacy intervention, and call on public and private stakeholders to invest in the literacy of middle level and high school students today, while simultaneously building the knowledge base. To read the full Carnegie report, please visit [www.carnegie.org/literacy/why.html?gclid=C7forqzFw5cCFQt4Hgod41e5TQ](http://www.carnegie.org/literacy/why.html?gclid=C7forqzFw5cCFQt4Hgod41e5TQ)  
Or [www.all4ed.org/publications/ReadingNext/](http://www.all4ed.org/publications/ReadingNext/)

### WRITING NEXT Report

The Alliance for Excellent Education has published a new report, *Writing Next*, that “trumpets writing as an important component to literacy instruction ... a predictor of academic success ... and a basic requirement for participation in civic life and the global economy.” The report includes an analysis of Eleven Elements of Effective Adolescent Writing Instruction, including writing strategies, summarization, collaborative writing, inquiry activities, specific product goals, prewriting, process writing approach, and writing for content learning. The full report is available at [www.all4ed.org/publications/WritingNext/index.html](http://www.all4ed.org/publications/WritingNext/index.html)

## UNION RESOURCES

### American Federation of Teachers

[www.aft.org/topics/reading/index.htm](http://www.aft.org/topics/reading/index.htm)

*Where We Stand: K-12 Literacy AFT Resolution 2007*

### National Education Association

NEA Resources

[www.nea.org/reading/index.html](http://www.nea.org/reading/index.html)

Search middle level literacy  
[www.nea.org/app/search/performSearch.do](http://www.nea.org/app/search/performSearch.do)

Search adolescent literacy  
[www.nea.org/app/search/performSearch.do](http://www.nea.org/app/search/performSearch.do)



## **U.S. DEPARTMENT OF EDUCATION**

### **National Center for Education Evaluation and Regional Assistance**

#### **Improving Adolescent Literacy: Effective Classroom and Intervention Practices August 2008**

This report is in the public domain. While permission to reprint this publication is not necessary, the citation should be: Kamil, M. L., Borman, G. D., Dole, J., Kral, C. C., Salinger, T., and Torgesen, J. (2008).

*Improving adolescent literacy: Effective classroom and intervention practices: A Practice Guide* (NCEE #2008-4027). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from [www.ies.ed.gov/ncee/wwc](http://www.ies.ed.gov/ncee/wwc).

This report is available on the IES Web site at [www.ies.ed.gov/ncee/wwc](http://www.ies.ed.gov/ncee/wwc).

This practice guide provides five recommendations for increasing the reading ability of adolescents. The first three recommendations are strategies that classroom teachers can incorporate into their instruction to help students gain more from their reading tasks in content-area classes. The fourth recommendation offers teachers strategies for

improving students' motivation for and engagement with learning. Together, the recommendations offer a coherent statement: specific strategies are available for classroom teachers and specialists to address the literacy needs of all adolescent learners. The fifth recommendation refers specifically to adolescent struggling readers, those students whose poor literacy skills weaken their ability to make sense of written material. Although not an exhaustive list, the recommendations are representative of panel members' thinking about methods that have the strongest research support and those that are appropriate for use with adolescents. The first four recommendations can be implemented easily by classroom teachers within their regular instruction, regardless of the content areas they teach. Recommendations for teaching students about the discourse patterns of specific subjects that adolescents study (for example, different ways of presenting information, creating arguments, or evaluating evidence in science compared with history) are not included in this guide because the formal evidence base for these methods is not yet sufficiently developed. The fifth recommendation refers to reading interventions that in many cases must be provided by reading specialists or specially trained teachers.

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## Resources

In offering these recommendations, we remind the reader that adolescent literacy is complex. There are many reasons why adolescents have difficulty making sense of texts, and there are many manifestations of these difficulties. Addressing students' needs often requires coordinated efforts from teachers and specialists. Readers should also note that appropriate professional development in reading has been shown to produce higher achievement in students. Providing professional development to content-area teachers focused on instructional techniques they can use to meet the literacy needs of all their students, including those who struggle, is highly recommended in this practice guide. Professional development also needs to address the specific literacy demands of different disciplines. One attempt at specifying these demands describes specific skills in mathematics, science, social studies, and English. Focusing on these skills would be an ideal starting point for professional development for content-area teachers who want to incorporate elements of literacy instruction in their content area instruction.

### **Recommendation 1.**

Provide explicit vocabulary instruction.

### **Recommendation 2.**

Provide direct and explicit comprehension strategy instruction.

### **Recommendation 3.**

Provide opportunities for extended discussion of text meaning and interpretation.

### **Recommendation 4.**

Increase student motivation and engagement in literacy learning.

### **Recommendation 5.**

Make available intensive and individualized interventions

# Expanding Literacy

## for Adolescents in all Content Areas, Grades 7-12

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### SECOND CALL FOR ARTICLE PROPOSALS FOR EDUCATOR'S VOICE, VOL. III

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*Educator's Voice* is a series dedicated to highlighting research-based classroom and school-wide strategies that make a difference in instructional practice in literacy. NYSUT proudly invites articles from all constituents and seeks real classroom stories about effective practices that are based on research. You are invited to submit a proposal for an article for the next volume, which will be published in Spring 2010. Authors must be an active or retired member of a NYSUT affiliate, including United University Professions and the Professional Staff Congress. If there are multiple authors, at least one author must be a current or retired NYSUT member.

Volume III of NYSUT's Journal of Best Practices in Education, *Educator's Voice*, will focus on the theme of "Expanding Literacy for Adolescents in all Content Areas, Grades 7-12." The Editorial Board especially encourages articles that are co-authored by teams of content teachers (grades 7-12) with higher education department faculty. Special attention will be given to articles that provide explicit connection between research findings and practical applications in classrooms. The Editorial Board seeks research-based instructional strategies that increase comprehension and can be used by content-area teachers, with content- or discipline-specific texts, to support secondary-level students who struggle with reading and writing.

**Audience:** Classroom teachers, SRPs, union leaders, parents, administrators, researchers, legislators and policymakers.

**Deadline for proposals:** April 30, 2009.

**Please note:** Submission of a proposal to write an article is not a guarantee of publication. Decisions will be made by the Editorial Board.

For more information,  
editorial guidelines and  
electronic application  
forms, go to:  
[www.nysut.org/educatorsvoice](http://www.nysut.org/educatorsvoice)  
and click on  
*Submission Guidelines*

# Expanding Literacy for Adolescents in all Content Areas, Grades 7-12

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## EDITORIAL GUIDELINES

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**Theme:** Secondary students use literacy skills to understand complex content. Instructional strategies that weave advanced literacy skills with content-specific material result in increased comprehension for all students.

**Audience:** Classroom teachers, union leaders, parents, administrators, researchers, legislators and policymakers.

**Article Length:** 1,800-1,900 words.

**Writing Style:** Authors are encouraged to write in a direct style designed to be helpful to both the practitioners and to others committed to strengthening education. Use of educational jargon is strongly discouraged.

**Manuscript** APA style.

**Requirements:** Footnotes at end of article.  
Pictures may be submitted and if used, permission will be required.  
Guidelines for photos will be provided.

**Article Submission:** Finished article saved in Word, and e-mailed to [kgraham@nysutmail.org](mailto:kgraham@nysutmail.org).  
One hard copy of your article, double spaced, mailed by Aug. 30, 2009, to:  
NYSUT Research & Educational Services  
Attn: Kathleen Graham Kelly  
800 Troy-Schenectady Road,  
Latham, NY 12110

**Rights:** Submission of a proposal is not a guarantee of publication.  
Publication decisions are made by the Editorial Board.  
NYSUT retains the right to edit articles.

The author will have the right to review changes made and if not acceptable to both parties the article will not be included in the *Educator's Voice*. NYSUT may also retain the article for use on the NYSUT Web site, [www.nysut.org](http://www.nysut.org), or for future publication in *New York Teacher*.

# Educator's Voice – Volume III

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## EDITORIAL GUIDELINES (CONT'D)

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*Educator's Voice – Volume III* will feature research-based classroom and school-wide strategies that increase student comprehension in secondary level classes in all content areas. Teams of authors from the same content department or building, interdisciplinary teams of teachers, and higher education partners working with classroom teachers are encouraged to submit articles that describe content-based literacy strategies that cross content areas and individual classes. NYSUT invites articles from all constituents and seeks real classroom stories about effective practices that are based on research. Authors are encouraged, but not required, to address points listed below. In the article, tell your stories in a straightforward way, considering the following:

A specific real-life description of the practice, strategy, or approach.

The research base that supports the practice, including research findings with citations and their relationship to your classroom practice.

The link to New York state standards, including ELA and others.

A description of the students impacted and the school context.

The evidence of success that indicates the strategy achieved the goal.

Evidence of broader impact on other students, teachers, the school building, and the district.

Involvement of parents in the strategy.

Possible implications and involvement of the wider school community, businesses, the medical profession, school libraries, public libraries, museums, and community colleges.

Implications for policymakers.

Quotes and testimonials from students, teachers and parents.

# Expanding Literacy for Adolescents in all Content Areas, Grades 7-12

## AUTHOR SUBMISSION FORM

Proposed by Author \_\_\_\_\_

If multiple authors, please list all names, and identify one author as primary author/contact person \_\_\_\_\_

Article working title \_\_\_\_\_

To which specific secondary content area(s) does this article apply? \_\_\_\_\_

\*Authors must be current or retired members of a NYSUT affiliate.

For articles with multiple authors, at least one must be a current or retired member of NYSUT.

**Please check all the categories of affiliation with NYSUT that apply to the primary author/contact person:**

1. I am an active teacher member of the following local \_\_\_\_\_
2. I am an active SRP member of the following local \_\_\_\_\_
3. I am an active higher education member of UUP or PSC  
Please identify campus \_\_\_\_\_
4. I am an instructor of NYSUT Education & Learning Trust course \_\_\_\_\_
5. I am a member of NYSUT Subject Area Committee \_\_\_\_\_
6. I am a retired teacher and member of the following retiree council \_\_\_\_\_

**Please attach a 150-word statement of the purpose of your article, the research base you propose to use and the educators who would be most interested in applying your findings in school settings. Include your current employment, including district, grade(s) and content area. Attach a separate contact list with primary author's name, address, day and evening phone numbers, and e-mail address.**

**Please return these forms by April 30, 2009, to:** NYSUT Research & Educational Services  
Attn: Kathleen Graham Kelly  
800 Troy-Schenectady Road,  
Latham, NY 12110

Or submit all requested information electronically to:  
[kgraham@nysutmail.org](mailto:kgraham@nysutmail.org).

### Deadlines for Volume III:

April 30, 2009	Author intent to submit article
May 30, 2009	NYSUT confirms acceptance of articles
Aug. 30, 2009	Article submission
April 2010	Publication

## NYSUT Education & Learning Trust

The Education & Learning Trust is NYSUT's primary way of delivering professional development to its members. ELT offers courses for undergraduate, graduate and in-service credit, partnership programs that lead to master's degrees and teaching certificates, and workshops and professional development programs for teachers, school-related professionals, and members from the health care community.

### **ELT offers the following graduate courses related to literacy:**

Creating a Balanced Reading and Writing Classroom

Enhancing Literacy for All Students

English Language Arts in Middle and Secondary Schools

Enriching Content Classes for Middle School and High School

Reading and Writing Across Content Areas

Writing as Learning

Reading Comprehension

Multicultural Children's Literature

Reading Strategies for At-Risk Students, K-8

Literacy for Students with Special Needs

For information on ELT, go to [www.nysut.org/elt](http://www.nysut.org/elt);  
e-mail [ELTmail@nysutmail.org](mailto:ELTmail@nysutmail.org); or call 800-528-6208 or  
518-213-6000 in the Capital District.





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