Beyond Sticky Notes: Using Digital Tools and Resources to Teach Comprehension Strategies

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Introduction

Beyond Sticky Notes examines ways to use Web 2.0 tools and authentic real world experiences, like book clubs and web-conferences, to enhance both the delivery of comprehension strategy instruction and transcend time and space barriers to create a true community of readers. The presentation will address how to:

- Use Web 2.0 tools to encourage interpersonal connections in addition to text-text, text-world, and text-self connections;
- Urge students use wikis and mind-mapping applications to ask meaningful questions of each other, not just of themselves or the author, regarding interpretations of texts;
- Foster authentic conversations regarding texts, spot lighting strategy use as it occurs within those conversations by using audio and video recording tools;
- Continue the dialogue about meaning through the use of discussion boards, avatars, and word clouds;
- Explore a wide variety of text genres and topics that may encourage students to employ the growing number of comprehension strategies they have at their disposal; and
- Recognize the variety of socially and culturally embedded strategies students may use in their day-to-day lives, and bridge these
understandings to reading school texts.

Why do we need to move beyond sticky notes? After all, as Harvey and Goudvis note, sticky notes are perfect for leaving “tracks of our thinking.” When the reader can not annotate in the margins of the book, sticky notes can be used to record observations, connections, questions, visualizations and much more. The ability to place the note on or near the event in the text that generated the thought makes the connection between specific details and the thinking that must occur when reading concrete. Sticky notes are portable and can be moved either to share thinking with the whole group or to another part of the text as continuous thinking reveals new patterns. They can also be collected as tangible evidence of students’ thinking and growth.

But if our goal is to move beyond the growth of an individual student, then, we must use tools that are dynamic, multi-modal and collaborative. Sticky notes are static; students can not embed a voice recording of their thinking or share a multimedia visualization they created. Sticky notes do not permit multi-modal responses and multiple means of representation. The use of sticky notes limits students to a single means of action and expression; as a result, they are effectively cut off from the ongoing dialogue that Web 2.0 tools have made possible. If our goal is to produce students that can fully participate in the global conversation and develop competencies in collaboration, media literacy and evaluation, then, we must teach students to use the 21st-Century technological tools that will allow them to be successful in school and beyond. In addition, we must first teach our librarians and staff which tools promote which comprehension strategies and what are the best practices in utilizing these Web 2.0 tools. If I am teaching the strategy, questioning, I would not use a multimedia tool like Animoto because I want a tool that promotes dialogue; instead, I would use a tool that facilitates questions and responses like a blog or a mind-mapping tool.

Knowledge construction including the act of creating meaning during reading is a collaborative enterprise. We must do more than capture that fleeting thought before it dissipates like a footprint in the sand. We must share our thoughts in grand conversations about research and reading because it is during the dialogue
that our thoughts metamorphose from nebulous entities as the questions and varying opinions of others hone our ideas into knowledge. Web 2.0 tools, like wikis and discussion boards, allow the conversation to be ongoing and to involve readers from different backgrounds and experiences. A web conference with readers from another culture reveals both the ways that culture shapes our reactions and thought processes, but also that other interpretations are possible. A question posed on a wiki becomes a starting point for discussion for everyone who has access to the wiki. Discussion boards, like WallWisher, permit a recursive dialogue so that our reflective thinkers and readers can return to ideas expressed weeks, or even months ago to continue the conversation. Learning does not need to and indeed should not remain linear. If we truly want students to continuously revisit core concepts to develop deeper understandings, then, we need to provide the pathways that students can revisit 24/7 from school, the library, and home. Grand conversations about literature and research should not be limited to the handful of people who can see the sticky note; instead, students’ thoughts, questions, and connections must be connected to the global conversation about meaning if we are to produce students who can collaborate across boundaries to create new understandings.

But if our goal is to create 21st-Century readers then, we must address the needs of our digital learners and use tools that are dynamic, multi-modal and collaborative. As Asselin and Doiron (2008) note, “While acknowledging variation within and among countries, the literature on youth and new technologies reveals unique ways this generation learns and distinct traits in their personal identities. They are growing up connected to the world and each other; they use technologies to communicate with known and unknown others and to shape their lives; they are action-oriented problem solvers and see technology as their primary tool; they define their identities by shared interests and experiences; they herald creative thinking, empowerment, and problem solving as key qualities in the new global economies; and they see themselves as competent pioneers in their personal and shared futures.”

Sticky notes, at least of the paper kind, can not be used to connect with others near and far. Sticky notes are static; students can not embed a voice recording of
their thinking or share a multimedia visualization they created. Sticky notes do not permit multi-modal responses and multiple means of representation. The use of sticky notes limits students to a single means of action and expression, but it is not just using a paper sticky note that is the problem. How and with what kinds of text we teach the use of comprehension strategies must evolve because the literate landscape has changed dramatically and rapidly. Summarizing emerging trends, Asselin and Doiron (2008) note that “Spurred by explosive developments in information and communication technologies generally and Web 2.0 specifically, the meanings of knowledge (Castells, 2000; Gilbert, 2005); and literacy (Lankshear & Knoebel, 2003; Leu, Kinzer, Coiro, & Cammack, 2004; Lonsdale & McCurry, 2004) are changing profoundly. Today’s students view digital technologies very differently from their teachers as they seamlessly integrate them into all aspects of their lives (Lenhart, Madden, & Hitlin, 2005; Media Awareness Network, 2005; Organization for Economic and Cooperation Development, 2001). Outside of school, many young people comfortably use a wide variety of new literacies associated with new technologies and use Web 2.0 tools to construct and distribute knowledge (Knoebel & Lankshear, 2007; Lenhart, Madden, Macgill & Smith, 2007). These new literacy practices are also defining the new workplace in the knowledge economy (Lonsdale & McCurry, 2004).”

Their conclusions are reflected in the Position Statement by the National Council of Teachers of English (2008):

Because technology has increased the intensity and complexity of literate environments, the twenty-first century demands that a literate person possess a wide range of abilities and competencies, many literacies. These literacies—from reading online newspapers to participating in virtual classrooms—are multiple, dynamic, and malleable. As in the past, they are inextricably linked with particular histories, life possibilities and social trajectories of individuals and groups. Twenty-first century readers and writers need to:

- Develop proficiency with the tools of technology
- Build relationships with others to pose and solve
problems collaboratively and cross-culturally
• Design and share information for global communities to meet a variety of purposes
• Manage, analyze and synthesize multiple streams of simultaneous information
• Create, critique, analyze, and evaluate multi-media texts
• Attend to the ethical responsibilities required by these complex environments

These new literacies demand that how we use and teach comprehension strategies evolve to keep pace with the rate of change.

Knowledge construction – including the act of creating meaning during reading – must become a collaborative enterprise. We must do more than capture that fleeting thought before it dissipates like a footprint in the sand. We must share our thoughts in grand conversations about research and reading because it is during the dialogue that our thoughts transform from nebulous entities into knowledge as the questions and varying opinions of others hone our ideas. Web 2.0 tools, like wikis and discussion boards, allow the conversation to be ongoing and to involve readers from different backgrounds and experiences. A web conference with readers from another culture reveals both the ways that culture shapes our reactions and thought processes, but also that other interpretations are possible. A question posed on a wiki becomes a starting point for discussion for everyone who has access to the wiki. Discussion boards, like WallWisher, permit a recursive dialogue so that our reflective thinkers and readers can return to ideas expressed weeks, or even months ago to continue the conversation.

**Making thinking visible**

Why focus on Web 2.0 Tools? Web 2.0 Tools are just that – tools that can be employed by the user to think, read, question, collaborate, build knowledge and write, or the same tools can be used to reiterate facts and create bird reports albeit in a much more interesting format. Everyone – and I’m just as guilty as the next –
gets so excited about the tools that we lose sight of the fact that it is the task that the user accomplishes with the tools that is the really important piece. Our excitement about the tools is in part due to three changes that Web 2.0 tools have made in the learning environment: it is no longer necessary to spend long periods of time teaching the tool, nor is it necessary to have expensive equipment and the tools facilitate the collaborative construction of knowledge. But the success of using Web 2.0 tools in increasing student achievement is very much dependent on what we ask students to do with these powerful tools.

- Web 2.0 Tools are just that – tools
- Exciting and interactive tools, but still just tools
- It’s the task, not the tool
- It’s always who is using the tool and for what purpose

Our purpose for helping our young people use the tools is clear: Web 2.0 tools facilitate making thinking visible which helps children develop a repertoire of thinking strategies to handle challenging texts, and guides them to be increasingly aware and in charge of their own thinking processes.

Top ten digital tools for making thinking visible:

1. Videos
2. Brainstorming tools, like Mindmeister
3. Graphic organizers, like MyWebspiration
4. Thinking process maps, like Exploratree
5. Collaborative whiteboards, like Dabbleboard
6. Wikis, like PBWorks
7. Blogs
8. Podcasts
9. Social networking sites, like Twitter
10. Multimedia presentation tools

The scope of this paper and presentation prevent elaborating on each type of tool listed so instead I will focus on one for each strategy discussed.
Videos are not new; the first public screening of projected motion pictures occurred in a café in Paris in 1895 (Rabiger, et al., 2011). What is new is how easily videos can be created, edited, and shared with equipment that is either relatively inexpensive or already built in to existing mobile devices or computers. What is both new and amazing is how transformative and transfiguring viewing the thinking processes of a proficient reader can be. Children can not replicate what has never been made visible to them. The simple act of recording the think-aloud allows students to observe, revisit, and record their observations for use as a scaffold the first few times they employ the strategy. More importantly, it gives them anytime, anywhere access to instruction on how to think about and have an ongoing dialogue with the text. Videos can be embedded in blogs and wikis or uploaded to video sharing websites, like YouTube, SchoolTube, or TeacherTube so that the model is always available. The efficacy of modeling has been demonstrated in numerous research studies. One group of studies examined the effects of teachers’ modeling of cognitive strategies, like think-alouds and direct explanations, on children’s comprehension activities. After the teachers modeled the use of comprehension strategies, students were mentored as they used the new strategy until they were able to employ it independently. The increases in children’s ability to understand the text were so dramatic that “the very concept of instruction was redefined from ‘mentioning’ [the strategies that should be used] to making concrete the mental and motivational processes used by proficient readers” (NICHD 2000).

Additional research by Fielding and Pearson (1994) supports the use of scaffolded instruction that begins with modeling, through think alouds, the strategies good readers use to access and create meaning. Fielding and Pearson suggest a four-step approach that includes modeling, guided practice, independent practice, and application of the reading strategies in authentic reading situations. Further support for explicit modeling and the gradual release of responsibility is provided by Vygotsky’s (1978) early work on instruction within the zone of proximal development and scaffolding, which is clearly illustrated in the graphic to the right:
The ease-of-use and availability of video recording devices as well as webcams mean that the “scaffolding [which] occurs through the support of the ‘more knowing other’” can occur when the reader needs it. When we or our patrons do a think-aloud, it should never be a one-shot, must-be-present to see event. If a reader is absent or distracted by illness, hunger, or any of a myriad of events that can prevent children from focusing on the day of the think-aloud, he or she should be able to click on Play and see and hear what thinking about reading looks and sounds like. For those of us who are camera shy, focus instead on the benefits to the world’s future leaders and problem-solvers. Having access to a model of how a proficient reader thinks is too important to not be available because you are nervous about how you look or sound on video. For those of us who worry that the think-aloud we are conducting is not quite yet worthy of being filmed, keep in mind two thoughts: 1) You are most likely an over-achiever (almost every librarian I know is) so you will never achieve the state of perfection your highly-analytical mind demands. 2) If the think-aloud session is truly not quite good enough to be videotaped, it is not ready to serve as a model for your readers.
Utilizing Web 2.0 tools to make connections

According to Harvey and Goudvis (2000), “Readers pay more attention when they relate to the text. Readers naturally bring their prior knowledge and experience to reading but comprehend better when they think about the connections they make between the text, their lives, and the larger world.” Readers even those who are proficient need to be shown how to activate their prior knowledge by previewing the text, the purpose for reading, and their knowledge of the author and/or genre. Activating that prior knowledge and forging those connections is crucial to understanding. Before reading begins, it is essential to help readers activate schema in order to uncover the foundation or scaffold for further reading. Research clearly shows that there is no difference between the recall of good readers and poor readers when their prior knowledge is the same. Using digital tools and resources - like simulations, videos, virtual field trips and databases replete with rich resources - levels the playing field. Children who have deficits in their prior knowledge of topics typically studied in school (primarily as a result of socio-economic factors) can use these digital tools and resources to overcome gaps in their background knowledge.

During reading, connecting helps readers focus on the topic; engages them to begin the active construction of understanding; and acts as a tool to unravel confusion. Effective readers use what they know to understand what they read by:

- Connecting the text to their personal experiences (Text to Self)
- Connecting the text to the experiences of their social networks (Text to Social Network)
- Connecting the text to other texts they have read (Text to Text)
- Connecting the text to their cultural experiences (Text to Culture)
- Connecting the text to world events and history (Text to World)

The top ten digital tools for connecting:
1. Online notice boards, like Wallwisher
2. Wikis, like PBWorks
3. Collaborative workspaces, like VoiceThread
4. eReaders with annotation capabilities
5. Social networking sites, like Twitter
6. Collaborative note-taking and knowledge-sharing tools, like Diigo
7. Brainstorming and thinking tools, like MindMeister
8. Google Docs
9. Avatar creation sites, like Voki
10. Word cloud generators, like Wordle

The best analogy for online notice boards, like Wallwisher, is to think of it as a virtual board with unlimited pages where the user can create virtual sticky notes. The directions for using Wallwisher are so easy that they can be included in a footnote. When you are modeling how and why proficient readers apply comprehension strategies using Web 2.0 tools, you are not demonstrating how to use the tool. The benefit of using Web 2.0 tools is that the tools are so easy that very little explanation is necessary. You are modeling what the strategy looks and sounds like. Title the wall with the text you are using to model. Explain that good readers make connections before, during, and long after reading. Begin by making connections to the title, author, genre, topic, and illustrations. As you make the connections, double click anywhere on the wall and type your note. Related thoughts can be stacked on top of, next to, or behind other notes. In order to make connections with other texts and media, you can add links to a website or video by pasting the URL at the bottom of the note. You will certainly want to make a link to the video recording you are making of the modeling session. As you are modeling, readers can be recording on the same wall what connecting looks and sounds like before reading. Their observations can serve as an anchor chart that they can refer to 24/7 from any internet-connected computer or mobile device. As a group, you can organize the notes so that children can see, for example,

2 Go to [http://www.wallwisher.com/build](http://www.wallwisher.com/build) to build your wall. First, choose your wall color and add distinguishing words to the end of your wall URL if you would like to personalize the wall. Click on the options to select who is able to view or post notes. If you want to approve the posts click on the check box. Type in a title for your Wallwisher by clicking on Click here to edit the title and do the same for the subtitle. Add an icon to the wall by clicking on Click to select image. Choose one from the ones provided or upload a picture from your picture library by clicking on the Browse button. When you have finished click on the done button in the bottom right hand of the screen.
how text-to-self and text-to-text connections are similar and different, or what connecting looks like before, during, and after reading. Do not worry that a child – inadvertently or purposely – might move or delete others’ notes; only the creator of the wall, or the author of the sticky note can move it. The sticky notes can be edited as understanding evolves and other walls can be created and embedded in wikis as knowledge grows. The reader can subscribe to the wall’s RSS feed so that he or she is notified as more connections are forged and added. Finally, the use of online discussion boards facilitates the collaborative creation of knowledge and utilizes the multimodal literacies of our digital natives.

**Using wikis to ask meaningful questions**

“Questioning is the strategy that keeps readers engaged. When readers ask questions, they clarify understanding and forge ahead to make meaning. Asking questions is at the heart of thoughtful reading,” claim Harvey and Goudvis (2000). Questions spur discussion and research. The scientific evidence for the efficacy of asking questions in comprehension is so strong that the National Reading Panel recommends explicit instruction in self-questioning. The questions we need to model are those that arise naturally as a result of the reader’s interaction with the text, other texts, and the world. Good readers ask questions before, during, and after reading. They ask:

- Essential Questions
- Elaborating Questions
- Clarification Questions
- Hypothetical Questions
- Strategic Questions
- Probing Questions
- Unanswerable Questions

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3 One thing we as librarians need to keep in mind is that providing the answer is the surest way to end discussion and stop research.
Top ten digital tools for questioning:

1. Wikis, like PBWorks
2. Collaborative workspaces, like VoiceThread
3. Avatar creation sites, like Voki
4. Microsoft Word
5. Online notice boards, like Wallwisher
6. Social networking sites, like Twitter
7. Collaborative note-taking and knowledge-sharing tools, like Diigo
8. Survey tools, like Survey Monkey
9. Brainstorming and thinking tools, like MindMeister
10. Rollyo or Google Custom Search Engine

 Wikis, like PBWorks, allow readers to pose higher-level questions and work collaboratively to create the answers which is exactly the skill that 21st-Century employers are demanding and our 21st-Century readers need. Why wikis instead of blogs? Wikis facilitate the collaborative construction of knowledge; blogs support the individual production of knowledge. When you look at who is using wikis and for what purposes, you see Fortune 500 companies, governmental agencies, and major defense firms. In today’s fiercely competitive job market, one question the interviewer will certainly ask is, “Can you collaborate anywhere, anytime to deliver services, produce content, and manage the workflow?” If you answer no, you are not considered an employable candidate. Using PBWorks for Collaborative Project Management (2011) notes that “The Financial

Note the overlap between the tools used for questioning and those used for connecting. The top five are the same.
Times uses PBworks as a central hub for project management. At the beginning of each project, team members use the wiki to share information, manage documents, and record conversations.

As a project develops, the wiki continues to grow, adding notes, organizing files, and linking in other tools like the company’s static intranet and online spreadsheets. Projects can also become interlinked, allowing new projects to leverage the hard-won knowledge of previous projects to do things faster, better, and more efficiently.

The same benefits being reaped by major industries are available to even our youngest readers and writers. Even very young children use the wiki to ask questions before, during, and after reading, or as they are conducting research. After the librarian models the strategy, he or she would share the following directions from the wiki page on questioning, “As you read, note questions that you wonder about on sticky notes. After reading, transfer your most thought-provoking questions to this wiki so that every one can benefit from the thinking you have made visible. If your question is answered as you continue to read, note it in the Comment box and code it Answered! If your question has not been answered, note it in the Comment box and code it Still wondering ...? As we share our thinking, others may be able to answer your questions and connect with what you are thinking. You may have so many great questions that your teacher might invite you to create your own Asking Questions page! Remember to also code your sticky notes by using A for Answered! and W for Still wondering ...?.”

Also on the wiki page, are question stems to jumpstart their thinking. Readers will either choose one of the question stems, or generate their own questions.5

Other children respond to their peer’s question by using the Reply feature. They begin their reply by praising the type of question the reader posed and then, they share what they think or know either from their existing schema, additional research, or inferences they made while reading. Finally, they might share additional questions they have, a suggestion for honing the question, or a useful resource, like a link to a video or website.

5 The wiki, Teaching Thoughtful Learners, has resources for each of the comprehension strategies as well as models; it can be accessed at https://teachingthoughtfullearners.pbworks.com/w/page/19949446/FrontPage.
After at least one child thoughtfully replies to the first child’s question, other readers are invited to piggyback or build upon the question or the response. The question-answer format teaches children how to use the wiki and more importantly, demonstrates the benefits of collaboration. Using the wiki to pose and answer questions helps to build a vibrant and collaborative community of readers; in addition, children begin to grasp two enduring understandings: 1) A single question can have multiple, valid answers and 2) Enduring understandings begin with essential questions.6

Visualizing in the cloud

Research shows that proficient readers make meaning by creating their own set of unique mental images to accompany the text; poor or reluctant readers, on the other hand, have more difficulty visualizing and as a result become frustrated and disengaged with the text (Beers 2002). As Zimmermann and Hutchins (2003) note, “When sensory images form in a child’s mind as he reads, it is an ongoing creative act. Pictures, smells, tastes, and feelings burst forth and his mind organizes them to help the story make sense. It is this ongoing creation of sensory images that keeps children hooked on fiction, poetry, and much nonfiction.” Critically examining the sensory images children form as they read reveals much about what children did or did not understand. If the sketch is rich in accurate details faithfully conveyed, then the reader was engaged with and understood the text. If significant details are lacking or inaccurately depicted, then there are gaps in the reader’s understanding. Furthermore, details students do not remember to include in their visualizations are details they are unlikely to recall as they make meaning or answer test questions.

Top ten digital tools for visualizing:

1. Drawing tools, like TuxPaint and FlockDraw
2. Google Sketch-up

6 The wiki, Teaching Thoughtful Learners, has resources for each of the comprehension strategies as well as models; it can be accessed at https://teachingthoughtfullearners.pbworks.com/w/page/19944466/FrontPage.
3. **MakeBeliefsComic**  
4. **Historic Tale Construction Kit and Myths and Legends**  
5. **Popplet**  
6. **Timeline tools, like TimeToast**  
7. **Word cloud generators, like Wordle and Tagxedo**  
8. **Google Earth**  
9. **Chart making tools, like Chartle**  
10. **Visual vocabulary tools, like Wordia**

Before the evolution of Web 2.0 and other multimedia presentation tools, readers could only share their visualizations through sketches and drawings. Now, children can draw and share their sketches online; collaboratively create visualizations; make words into picture; create their own comics; and record a sketch with or without audio. The choice of which drawing tool to use is very much dependent on the age of the children using the tool. I encourage younger children, ages 3 through 12, to use Tux Paint, an award-winning drawing program that combines drawing, sound effects, and a cartoon mascot who guides students on how to use the program. While the Tux Paint program must be downloaded to a computer, it is free, Open Source software. The program has an impressive array of special effects; it also is one of the few tools that allow for international character input, including Korean. You can browse the gallery online at [http://www.tuxpaint.org/gallery/](http://www.tuxpaint.org/gallery/). For older children, I recommend two tools: FlockDraw and Google Sketchup. FlockDraw is a real time collaborative drawing tool; as one user explains, “No matter how good you are at explaining ideas, sometimes nothing beats a drawing. FlockDraw is an easy to use online whiteboard with all the tools you need to quickly, collaboratively sketch your next big idea and share it with the world.” Google Sketchup is already being used by K–12 educators and their students around the world to explore, explain, and present their ideas using 3-D models. All of the tools described above allow children to share their visualizations with the world.
Another Web 2.0 tool being used by children around the world to visualize text is not truly a drawing tool; instead, it is a word cloud generator, like Wordle or Tagxedo. Children can copy and paste any text they are reading into the generator which creates a word cloud based on the frequency with which the word (except for article, prepositions, and conjunctions) appears. You can change the layout, color scheme, and font. Tagxedo allows the reader to constrain the cloud into a shape, like the dove below. Readers use the word cloud as an advance organizer to preview the main ideas before reading and to share their interpretations after reading.

Determining importance

Kuhlthau (2010) notes, “High levels of literacy are required of the 21st century learner. Students need to go beyond learning to read, to reading to learn. They need to be able to comprehend informational texts as well as understand stories in fiction. Determining importance in information texts is an essential skill in the information environment in which they live and learn”

Top ten digital tools for determining importance:

1. Collaborative note-taking and knowledge-sharing tools, like Diigo
2. Brainstorming and thinking tools, like MindMeister
3. Word cloud generators, like Wordle
4. Google Scholar
5. Google Fast Flip
6. Collaborative workspaces, like VoiceThread
7. Microsoft Word
8. Inquiry-based learning, like the Online Research Models
9. Online notice boards, like Wallwisher
10. Online binders, LiveBinders

Diigo is a combination of a group research tool and a knowledge-sharing community. Children can be placed into online student research groups where they can collaboratively search for resources as well as add highlights and annotations to texts they are jointly reading. I first discovered Diigo as a shared social bookmarking site and it is still my first stop when I need resources, but it was not until I read Bill Ferriter’s wiki at http://digitallyspeaking.pbworks.com/w/page/17791568/FrontPage that I began to explore how Diigo could be used to help children determine importance. Ferriter (2010) asks his audience to “Imagine the collective power of an army of readers engaged in ongoing conversation about provocative ideas, challenging one another’s thought, publicly debating, and polishing personal beliefs. Imagine the cultural understandings that could develop between readers from opposite sides of the earth sharing thought together. Imagine the potential for brainstorming global solutions, for holding government agencies accountable, or for gathering feedback from disparate stakeholder groups when reading moves from a ‘fundamentally private activity’ to a ‘community event.’ That is an inspiring vision of what could be, isn’t it? And it is a vision that Diigo—a popular social bookmarking application and personal research tool—makes possible today. After creating a free account and installing a simple toolbar to their internet browser, users can add highlights and annotations to any web-based text that are visible directly on the original document and after signing in to Diigo.” Readers can also use Diigo Annotations to engage in conversations around shared texts.
The ability to determine importance in fiction and nonfiction clearly differentiates my poor from my proficient readers. Poor readers become lost in the minutia of the story, or confuse details with the main idea in nonfiction. My proficient readers, on the other hand, effectively utilize both text structures and features to summarize and identify the main idea(s) or theme(s). Using Diigo, my proficient readers can model for and collaborate with my less than proficient readers as they analyze titles, bold text, subheadings, illustrations, diagrams, labels, bulleted lists, and captions to determine importance. The shared dialogue results in heightened knowledge for both groups of readers. In addition, other research groups can examine the evidence of each group’s thinking and benefit from viewing multiple models of how other readers use text features to determine the main idea(s). Their enhanced knowledge gleaned during the collaborative dialogue made possible by Diigo is critical when they began to determine the importance of information contained on websites. Reading online requires the same use of comprehension strategies that are employed when reading print, but reading online is more challenging and requires additional skills. The use of Diigo or other online, collaborative note-taking and annotation tools helps to scaffold students’ reading which is especially important when they are reading information presented in the three dimensional,
Extending grand conversations 24/7

In his article “Library 2.0,” Harris (2006) talks about the use of blogs, podcasts, and other Web 2.0 applications in the literature and reading promotion efforts of teacher-librarians. Harris notes, “The heart of the concept, though, is not about the tools, but rather the communities and the conversations that they make possible.” Web 2.0 tools make possible the contexts for reading that are embraced outside of school: book clubs, discussion groups, and virtual communities of readers sharing ideas online. One type of conversation that wikis, survey tools, webcams, and Vokis make possible is grand conversations. A grand conversation is an authentic student led conversation about a text where students ask the questions, discuss their thoughts and feelings, and make meaning as they talk about the text. What makes grand conversations different from other forms of whole group book discussions is that the teacher does not direct grand conversations; instead, the dialogue is student-directed. Every student has the opportunity to critique, debate and extend upon each other’s ideas.

Moreillon (2009) notes that “The purpose of literature circles [another type of literature conversation] is to nurture life-long readers and invite critical responses to literature by providing students with choice, a safe environment for social discourse, and a combination of structured and unstructured activities to enhance their reader-response experience. We asked students simply to (a) choose books they wanted to read from a particular genre or other organizing criterion, (b) reflect on their reading, (c) discuss their reading with others in groups reading the same book, and (d) construct and publish their understandings of the elements of literature with respect to each title around which they interacted.”

How do you teach children to have grand conversations and participate in literature circles 24/7?

- Model, model, and model
• Embed videos of exemplary conversations
• Have students create the rubric and post it on the wiki
• Deploy webcams to facilitate synchronous discussions
• Use the Book Discussion Starters
• Teach children How to Lead a Book Club Discussion
• Encourage children to use Avatars to continue the discussions

Many educators think of an avatar as something which is used for gaming or for social networking; they see little educational value and some dangers in creating avatars. Preliminary research (Vilhjálmsson, 2003; Wang, Chignell, and Ishizuka, 2005) however indicates that users found similar learning tasks easier and more enjoyable, and the learning environment to be more personable and less threatening when avatars were utilized. The use of avatars in online learning appears to connect the learners in meaningful ways and assist in building both vibrant online communities which makes sense because we know that learning takes place in a social environment, and cognitive understanding and personal construction of knowledge depend on relations with others (Fung, 2004; Richardson and Swan, 2003; Vygotsky, 1978).
Why use a wiki to facilitate grand conversations and literature circles?

- A wiki is the ultimate enabler of collaboration
- Wikis are available 24/7
- Who can edit as well as what is controlled by the administrator
- A wiki can hold any kind of media -- text, images, videos, or diagrams
- Threaded discussions enable grand conversations
- Asynchronous conversations allow for more reflection

Grand conversations, literature circles, and online book clubs clearly benefit all of our students. Readers at all levels show marked increases in engagement, comprehension, and willingness to learn. Readers who are reading below grade level are willing to participate in literature discussions because they are attracted to using technology. The tools they can access online, like Visual Thesaurus and grammar check applications, help them feel more confident about expressing their ideas in writing. Many of the children, who struggle with expressing their ideas through writing, have no problem explaining their ideas orally or through multimedia presentations. Giving children the opportunity to use their strengths — oral expression of ideas — does more than build confidence; students can use the recordings or presentations they created to scaffold the transfer of ideas into written form. The discussions that take place help them better understand what they are reading and because those discussion are online, students can revisit them as needed. Other benefits of online literature conversations are just as obvious: readers need not be at a specific place or available at a specific time to participate. Summarizing current research about the benefits of participating in book clubs, Auger (2003) writes:

Tens of thousands of teachers and millions of students now take place in student-centered literature circles, also called book clubs or literature study groups, and the research on this phenomenon is on the rise (Daniels 2002). Studies have shown that when students are involved in authentic conversation about literature, they are more engaged in their
reading (Alpert 1987; Enciso 1996), and they take more risks (Eeds and Wells 1989). During small-group discussions, students voice emotional responses to literature (King 2001). Literature circles also promote students’ motivation to read and have been shown to improve students’ reading levels and performance on tests (Davis, Resta, Davis, and Camacho 2001).

Conclusions

Combining Comprehension Strategy Instruction and Web 2.0 Tools builds a community of readers and thinkers who can transcend time and space barriers to discuss 24/7 the ways that texts shape our understandings of ourselves and others. If we truly want our learners to continuously revisit core concepts to develop deeper understandings, then, we need to provide the pathways that students can revisit 24/7 from school, the library, and home. Grand conversations about literature and research should not be limited to the handful of people who can see the sticky note; instead, readers’ thoughts, questions, and connections must be connected to the global conversation about meaning if we are to produce thinkers who can collaborate across boundaries to create new knowledge and understandings. “Certainly in the United States, our goal has been to prepare an active and effective citizenship. It follows then, that students must learn to step into the global conversation and develop competencies in using the technological tools that support collaboration, media literacy and evaluation” (Alexander, 2006; Borja, 2006; McAnear, 2006). Using these Web 2.0 tools does more than engage our digital learners; it teaches them the 21st-Century Skills and Literacies they need to become the leaders of tomorrow.
References

King, C. (2001). “I like group reading because we can share idea: the role of talk with the literature circle.” Reading, 35, 32-36.
