Stephanie was worried about this development. She decided to go to her students, to find out what they could do together to use the blog in more thoughtful ways. Stephanie started an online discussion on the class blog, and her students shared these comments:

“Can I put one of my poems up there?”
“I want to be able to post questions to the blog and have my classmates answer them.”
“I really want to write about the book I am reading at home...not just what I think will happen next in Spiderwick.”

These comments opened up important issues for Stephanie, issues that are essential for all of us to consider as the Internet enters our reading and language arts classrooms.

The purpose of this article is to explore ways in which blogs can support literacy programs, especially to develop higher order thinking (HOT) while reading and writing. First, I will provide an introduction to and a theoretical rationale for blogging. Next, resources and ideas will be shared to help spark possibilities for blogging in an intermediate-grade classroom. Four common types of educational blogs will be presented. Finally, HOT blogging, an instructional framework that uses a blog to develop higher order thinking, will be described.

What Is a Blog?

A blog, short for weblog, is an easily editable webpage with posts or entries organized in reverse chronological order. Many different formats for blogs are emerging (Mortensen, 2008), and the features that are used depend on both the blogger and the tools provided by the blog host.
Typically, a blog consists of a header and two to three columns. Figure 1 depicts a simple three-column blog. The center column is often home to the most recent post (text entry) by the author. Reader comments (replies or responses to the author’s post) on this blog can be found in the right-hand column. Blog comments can often be found immediately under the post to which the comments refer. The newest posts appear first, and all posts include both a title and date. The archive houses older posts and comments. This archive usually appears in the left- or right-hand column. The left-hand column in Figure 1 also includes a blogroll (i.e., links to other blogs or frequently visited websites) organized in list fashion and often by category. In this way, the author and interested readers can visit related blogs from one central location with ease.

Blogs can have multiple pages. Pages and categories are two additional ways to organize posts and comments on a blog. These areas are similar to file drawers full of folders. Each page/category can hold links or posts related to a specific topic or student. A teacher may assign a specific page of the blog to a single student. A parent searching for that student’s writing would easily locate the writing on that student’s page through a list of names in a side column of the blog. Similarly, a category for “artwork” might be created allowing readers to find all student posts across the blog related to artwork. Some additional features that blogs may include are language translators, calendars, and photo viewers. The blog’s author, or blogger, determines which features are used.

Why Bother Blogging: A Theoretical Rationale

The Internet is this generation’s defining technology for literacy (Coiro & Dobler, 2007; Leu, Kinzer, Coiro, & Cammack, 2004; Leu et al., 2007). It is home to a continuously emerging set of new technologies for literacy such as search engines, e-mail, blogs, wikis, instant messenger, social networking tools, and many others yet to emerge. Each requires new skills and strategies. Schools need to prepare students for
these new literacies by integrating them into the curriculum, and blogs are an easy way to begin.

Some believe that we simply need to place computers in the hands of our students, and they will learn what they need (Negroponte, 2006). Yes, many of our students can develop basic tool use without instruction. We see them on the Internet at home, communicating through instant messenger (Lewis & Fabos, 2005), blogs (Mortensen, 2008), and other online tools (Lenhart & Madden, 2005). One survey has reported that some 12 million adolescents aged 12–17 maintain their own blogs in the United States (Lenhart & Madden, 2005). However, simply using these tools does not predicate effective and efficient use. Howard Reingold (2006) summed it up well by describing our students in this way:

This population is both self-guided and in need of guidance, and although a willingness to learn new media by point-and-click exploration might come naturally to today’s student cohort, there’s nothing innate about knowing how to apply their skills.... (n.p.)

Furthermore, a blog does not simply develop communication skills. Instead, online communication has become an essential aspect of online reading comprehension (Castek et al., 2007). On the Internet, writing is intrinsically integrated with the reading comprehension process (Castek et al., 2007; Leu et al., 2007). As online readers gather information to solve a problem, they frequently analyze information, critically evaluate, synthesize across multiple texts, and communicate with others using instant messaging, e-mail, blogs, wikis, or other communication vehicles (Leu, Kinzer, et al., 2004; Leu et al., 2007). These essential new literacies of online reading comprehension emphasize higher order thinking skills like analysis, synthesis and evaluation (Anderson, 2005; Bloom, 1956; Coiro & Dobler, 2007) and can be practiced through blogging.

Classroom blogs bridge the ever-widening gap between out-of-school literacies and in-school literacies (Alvermann, Huddleston, & Hagood, 2004; Hinchman et al., 2003). Most literacy educators work hard to provide authentic opportunities that attempt to break down those barriers. Broadening the audience for student writing and thinking, providing a space for collaborating outside of the typical classroom discussion, problem solving on the Internet, and learning to communicate safely—all can be developed within the context of blogs.

Perhaps, however, the most cogent reason for classroom blogging comes from Mary Kreul, a teacher widely known for her online classroom work, from Richards School in Whitefish Bay, Wisconsin (Leu, Leu, & Coiro, 2004). When asked, “Why should educators take the time to blog?” Ms. Kreul replied,

I think the biggest advantage to blogs is that they provide an authentic audience for student writing and work in general. In the past the teacher was usually the only person who read student work. With a blog, student work can be read by classmates, parents, extended family members, school community members, project partners, classroom teachers, pre-service teachers, and anyone around the world who locates the class blog. (Personal correspondence, December 2008)

Four Common Types of Blogs Found in Elementary Classrooms

Some of the most common types of blogs being used in schools today are Classroom News Blogs, Mirror Blogs, Showcase Blogs, and Literature Response Blogs. Blogs often incorporate more than one of these primary functions and, given the creative minds of effective teachers and the rapidly changing nature of literacy on the Internet, many more types will emerge.

Classroom News Blog

Many classroom blogs are used to share news and information with parents and students. Often, this is the first type of blog a teacher will use (Richardson, 2006). Teachers update classroom news blogs on a regular basis, posting homework assignments, providing updates on curriculum for parents, and sharing any other information that could benefit the home–school connection. Examples of a classroom news blog can be found in Table 1.

Mirror Blogs

Mirror blogs allow bloggers to reflect on their thinking—hence the mirror metaphor. A teacher may post a response about a workshop recently attended, sharing insights gleaned. While reading a new professional book on literacy, a blogger might post quotes or
students from Portugal practice their English. The blog is a combination of student and teacher writing, artwork, and even audio messages from students. Many of the blog posts are student podcasts describing their day with the written text just underneath. Table 3 provides additional examples.

**Literature Response Blogs**

Literature response journals are common in elementary classrooms. A literature response blog simply moves this idea online where the teacher may sometimes post a prompt and invite student responses to a text. Using blogs to bridge a familiar “in school” activity with this “out of school” tool provides students with a different medium for literature response. Many teachers are not only posting their own reflective thinking but also include student reflections as well. Student comments of this type might include thoughts about lessons or content learned. Mirror blog examples may be found in Table 2.

**Showcase Blogs**

Many teachers use blogs to post student art projects, podcasts (audio clips), and writing in showcase blogs. Of particular interest are the ways in which second language learners can use these spaces to write and respond in their second language in more authentic ways and for more authentic audiences. Have Fun with English! 2 is an Edublogs award winner where compelling new ideas found in the book to a mirror blog.

<table>
<thead>
<tr>
<th>Classroom news blogs</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary Castle’s first grade blog</td>
<td>michellesmelser.blogspot.com</td>
</tr>
<tr>
<td>Mr. Thompson’s second grade classroom blog</td>
<td>gcs.infostreamblogs.org/thompson</td>
</tr>
<tr>
<td>Mary Kreul’s 4th grade class</td>
<td>mskreul.edublogs.org</td>
</tr>
<tr>
<td>Mr. Monson’s grade 5 blog</td>
<td>classblogmeister.com/blog.php?blogger_id=59644</td>
</tr>
<tr>
<td>TAS grade 3 ESL</td>
<td>grade3esl.blogspot.com/2008/08/welcome-to-20082009-school-year.html</td>
</tr>
</tbody>
</table>

Note. These blog URLs were correct at the time of publication but could change due to the dynamic nature of the Internet.

<table>
<thead>
<tr>
<th>Mirror blogs: teachers</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edublogs Insights</td>
<td>anne.teachesme.com</td>
</tr>
<tr>
<td>The Miss Rumphius Effect</td>
<td>missumphiuseffect.blogspot.com</td>
</tr>
<tr>
<td>Cal Teacher Blog</td>
<td>calteacherblog.blogspot.com</td>
</tr>
<tr>
<td>Mirror blogs: students</td>
<td></td>
</tr>
<tr>
<td>Carol Marits’ grade four class</td>
<td>classblogmeister.com/blog.php?blogger_id=119124</td>
</tr>
<tr>
<td>Brian Crosby’s 6th grade class</td>
<td>classblogmeister.com/blog.php?blogger_id=65078</td>
</tr>
</tbody>
</table>

Note. These blog URLs were correct at the time of publication but could change due to the dynamic nature of the Internet.
Blogmeister (classblogmeister.com) or The Edublogs Awards (edublogawards.com) are good choices. At the former site, hundreds of different teachers have set up their own classroom blogs. At the Edublogs site, blogs that have been voted “the best of” in a variety of categories over the past few years can be explored.

Step 2: Locate Additional Classroom Blogs With a Search Engine

Use a search engine to locate and study frequently visited classroom blogs on the Internet. With Google or Yahoo type the following terms: blog, classroom, fifth OR 5th grade. This combination of search terms will locate many fifth-grade blogs. The most frequently visited and linked-to sites will appear on the first few pages of results; these are blogs that other teachers often visit to get new ideas for their own classrooms.

Beginning to Blog

Here is a simple four-step process for beginning the blogging journey:

**Step 1: Explore Examples at a Central Site**

Visit two central sites with examples of educational blogs to gather ideas for a classroom blog: Class

**Step 3: Select a Blog Provider**

There are a number of different providers to choose from. Most are free. Creating one class blog for all

### Table 3

<table>
<thead>
<tr>
<th>Showcase blogs</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have Fun with English! 2</td>
<td>fwe2.motime.com</td>
</tr>
<tr>
<td>Ms. Cassidy’s grade one classroom blog</td>
<td>classblogmeister.com/blog.php?blogger_id=1337</td>
</tr>
</tbody>
</table>

Note. These blog URLs were correct at the time of publication but could change due to the dynamic nature of the Internet.

### Table 4

<table>
<thead>
<tr>
<th>Literature response blogs</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary Kreul’s Class Blog</td>
<td>mskreul.edublogs.org/tag/lit-circles/</td>
</tr>
<tr>
<td>Bearup’s Bloggers (fourth grade)</td>
<td>classblogmeister.com/blog.php?blogger_id=128294&amp;l =1225156782</td>
</tr>
<tr>
<td>English Corner (sixth grade)</td>
<td>classblogmeister.com/blog.php?blogger_id=17192</td>
</tr>
</tbody>
</table>

Note. These blog URLs were correct at the time of publication but could change due to the dynamic nature of the Internet.
While the steps to starting a blog are basic, please keep in mind that exploring options for classroom blogging and initial blog set-up will take time. With any new tool or curriculum, an initial time investment is typical. However, as familiarity and comfort grow, time demands diminish. Additionally, the extra time is well spent given the new opportunities to develop higher order thinking skills afforded through blogging.

**HOT Blogging: A Framework for Higher Order Thinking**

HOT blogging develops higher order thinking around the new literacies of online reading comprehension (Castek et al., 2007; Coiro, 2003; Henry, 2006; Leu et al., 2007). The approach consists of the following four recursive steps:

1. Bolster background
2. Prime the pump
3. Continue the conversation
4. Make multiplicity explicit

Each step integrates both traditional reading comprehension skills and the new, higher order

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**Step 4: Set Up the Blog**

Visit the website for the blog provider chosen and follow the steps to sign up. Blog owners have many choices. With some blogs, the owner has complete control over viewing, posting, and commenting. A teacher may wish to allow only students with a teacher-assigned password to read and post to the blog. An option to moderate and approve comments before the comments appear may also be of interest. These options and others are clearly explained in video tutorials found at edublogs.org/videos.
Bolster the Background

During this first stage, teachers post activities and questions on the blog designed to build background knowledge about the selection that students are reading. Then, students read online to locate, critically evaluate, synthesize information, and communicate their ideas by posting what they have found to the blog, inviting others to comment.

For example, before reading *Number the Stars* by Lois Lowry (1990), blog comments can invite students to locate three sites or other resources that could help their classmates prepare for reading and understanding the book. These resources help all students to build background knowledge and prepare them for reading the text.

Traditionally, dialogue journals have proved a useful tool for capturing exchanges that serve to deepen comprehension of text (Atwell, 1998). Moving this instructional practice onto a blog allows us to widen our audience for students, minimize the demands on the classroom teacher, and maximize the comprehension of texts. The four, recursive steps in the HOT blogging framework adapt dialogue journal approaches to the Internet to help students develop rich conversations through both talk and written text.

### Table 5

<table>
<thead>
<tr>
<th>Blog provider</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edublogs for teachers edublogs.org</td>
<td>Provides free, ad-free blogs for teachers at no cost. Students may comment if the teacher allows this. Especially helpful video tutorials for initial set up.</td>
</tr>
<tr>
<td>Edublogs for students edublogs.org</td>
<td>Provides free, ad-free student blogs at no cost. Each has an independent blog. Recommended for intermediate grade levels and higher.</td>
</tr>
<tr>
<td>21 Classes Cooperative Learning <a href="http://www.21classes.com">www.21classes.com</a></td>
<td>Provides free, ad-free blogs for teachers and students. Each student blog accessible from main portal. Communicate with all students simultaneously through main portal. Recommended for intermediate grade levels and higher.</td>
</tr>
<tr>
<td>ePals SchoolBlog <a href="http://www.epals.com/products/esb">www.epals.com/products/esb</a></td>
<td>Free to educators. Searchable archives allow past postings to be easily accessed. Design templates include calendars, surveys and classroom-only, parents-only, and public areas.</td>
</tr>
<tr>
<td>Landmark’s Class Blogmeister classblogmeister.com</td>
<td>Free to educators. Connects teachers to a variety of blogs at different grade levels. Easy to search for blogs by grade bands. Student pages/blogs can be created by teachers.</td>
</tr>
</tbody>
</table>

Note. These blog URLs were correct at the time of publication but could change due to the dynamic nature of the Internet.
prior knowledge remember more, are better able to
determine what is important in the text, and use that
knowledge to draw inferences from and elaborate on
the text to achieve higher levels of comprehension
(Afflerbach, 1990; Duke & Pearson, 2002; Pressley &
Afflerbach, 1995). Once background has been built,
students are ready to prime the pump.

Prime the Pump
During prime the pump, blogging can help students
think deeply about the background they have built
and what they have read in the beginning chapter(s)
of the text to share an initial interpretation (Langer
& Close, 2001). One approach is to post an invita-
tion to students to share any of the following types of thinking:

- Confusions that may need to be clarified
- First impressions of the characters or story line
- A summary of what has been learned so far
- Connections to themselves, other texts, or the world

A final aspect of prime the pump is to require stu-
dents to read what others in the class have posted
to prepare for a conversation. Instead of having stu-
dents tell their own thoughts in a small group or class
discussion, they should share other students’ com-
ments from the blog. This approach to starting the
conversation holds students accountable for reading
and considering their classmates’ perspectives right
from the start. During the discussion, students should
jot notes from the conversation to help them in the
next stage of the HOT blogging framework: continue
the conversation.

Continue the Conversation
In this stage, students begin to summarize and syn-
thesize understanding across multiple textual units.
While thinking about the novel they are reading, the
blog posts by other students, and the group/class
conversation, students are asked to synthesize what
has been shared and learned. Synthesizing is more
than simply summarizing though; it involves original
thinking (Harvey & Goudvis, 2000) and requires the
use of higher order thinking skills (Anderson, 2005;
Bloom, 1956). Synthesis can be challenging for both
the teacher to teach and the students to practice.

Partially completed outlines or guides can help. The
guide in Figure 3, for example, provides a scaffold
for students as they begin to synthesize across many
pieces of text to craft a new response.

Students should work in pairs while crafting syn-
thesis comments since this can prove especially sup-
portive. With this and during earlier stages in this
framework, good models and teacher think-alouds
will support the development of better student work.

The synthesis process can occur at any point in
the text and can be used multiple times in the course
of reading a novel or reading online. Reading through
student blog posts with a critical eye will help teach-
ers determine the amount of practice students need
with synthesis. The following are questions on which
to focus assessments of student blog posts:

- Do the posts include a summary of other stu-
dents’ blog posts or discussion comments?
- Do the posts include any new thinking?
- Are the posts well organized and focused?
- Do the posts reflect inferential thinking that
  moves beyond simple recall?

Make Multiplicity Explicit
Multiplicity is made explicit by inviting students to
read, think, and comment on the classroom blog.
Students regularly encounter how differently their
classmates think from one another. When differ-
ent ideas are expressed, students are supported in
thinking deeply about diverse beliefs and positions
(McLaughlin & DeVoogd, 2004). This too, is a type
of evaluation or higher order thinking skill, which re-
quires more than simple summaries or retells. Often,
this phase may be initiated by a prompt provided by
the teacher or by using a comment a student posted
previously and asking all students to address that is-

sue. This will draw out the many interpretations that
may exist. As students encounter multiple perspec-
tives, they will also see how important it is to support
one’s perspective. To convince someone with a dif-
fering point of view, evidence and clear explanations
become necessary.

Crafting a response that includes evidence is not
often easy. As with earlier stages in the framework,
a teacher think-aloud while constructing a well-
supported comment will increase the likelihood of
students learning how to support their comments with
evidence. Figure 4 shows how a teacher modeled the
Literacy Teaching and Learning Captured Through the HOT Blogging Framework

The skills and strategies required within the HOT blogging framework support a number of IRA/NCTE (1996) Standards for English Language Arts. Indeed, HOT blogging is an effective way to integrate the standards within a curriculum. When students read webpages and posts on blogs in addition to classroom texts, they “read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world” (p. 19). As students synthesize across websites and blog posts, they “gather, evaluate, and synthesize data from a variety of sources (e.g., print and

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**Figure 3**
Starting to Synthesize—Synthesis Scaffold

<table>
<thead>
<tr>
<th>My thoughts</th>
<th>Comments from</th>
<th>Comments from</th>
<th>Comments from</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy and paste your blog comment here</td>
<td>Copy and paste a classmate’s comment here</td>
<td>Copy and paste another classmate’s comment here</td>
<td>Jot some notes from your group/class discussion</td>
</tr>
</tbody>
</table>

Ask yourself this, How are my classmates’ comments the same or different from mine? In the chart above, circle ideas that are the same as yours. Box the ideas that are new or different. **When reading fiction, categorize these similarities and differences by Characters, Setting, Plot, Problem/solution or Themes:**

Now, take a few minutes to THINK about any NEW ideas you have about the text. You might choose to think about your classmates’ comments, and share your thinking about their ideas below:

Finally, combine your writing from the two boxes & paste it below. Voila! You’ve synthesized across multiple texts!
non-print texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience, and [they] use a variety of technological and information resources” (pp. 27–28). While writing for themselves and others they “employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes” (p. 25). When discussing the posts and the variety of perspectives found within, they “apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts” (p. 22). These standards and the HOT Blogging framework require the higher order thinking in which we want all our students to engage.

**Stephanie’s Story**

One final week remained in the school year. It had gone quickly, as all good years do. Stephanie noticed that only a few loose tea leaves remained in her cup during another reflective Sunday at home. The tealeaves reminded her, somehow, of her students’ comments from earlier in the year. Their ideas had prompted many new discoveries about the possibilities blogs hold for literacy learning.

**Showcasing Student Work**

“Can I put one of my poems up there?” In response to this student request, Stephanie set up a new page within her classroom blog, called Our Best. This was a place where students could publish their writing and artwork: a showcase for student work. She knew her students would benefit from a broad audience for their work, so she made this area of the blog available to anyone. She was somewhat apprehensive about doing so, but she set the blog’s permissions to require her approval before any comments appeared on the blog. She invited students to share the blog address with family and friends, so they could see their “published” pieces and receive comments. She was amazed at how many people provided thoughtful comments. Parents and grandparents, especially, posted many wonderful comments about work that appeared here. The demand from her students to publish their work at Our Best made the creative juices flow in their classroom.

**Asking Their Own Questions**

“I want to be able to post questions to the blog and have my classmates answer them.” This idea reminded Stephanie of a basic principle from reciprocal teaching (Palincsar & Brown, 1984, 1989)—that turning over the questioning process to students helped them to question the author better during reading and increased comprehension. Stephanie began setting up individual blogs, within her account. Next, she invited small groups of students, each week, to develop the best higher level question they could for the class from the book the class was reading and post it at one of their individual blogs. The class then
commented at the individual blog, just as they had at Stephanie’s blog earlier. This prompted much deeper thinking about the story than even Stephanie might have accomplished.

**Posting About Outside Reading**

“I really want to write about the book I am reading at home…Not just what I think will happen next in *Spiderwick*.” Stephanie smiled as she remembered this comment. On their individual blogs, students were encouraged to post about their interests and outside reading. A number of students quickly started sharing their outside reading experiences at their blogs. Others would visit these posts to gather ideas for new books to read and new online resources that provided extensive information about the book and the author. This, as much as anything, convinced Stephanie that blogging was changing the social practices around literacy in her classroom.

**HOT Blogging Reflections**

Stephanie thought, too, about her use of HOT blogging this year. Her use of this framework provided an important structure to increase higher order thinking in the books her students read. It was clearly visible. She thought this might have come from the increased use of online resources that students were reading as she frequently used the bolster the background and prime the pump steps at repeated points during the reading of a selection. As students gathered and shared online information about the topic, they had to synthesize across sources including classmates’ posts. This seemed to make them think more deeply about the story selection they were reading. This was especially evident when she compared her students’ initial blog posts to the ones at the end of the year.

Yes, it had been a very good year. Stephanie put on another pot of tea.

**References**


Cairo, J., & Dobler, E. (2007). Exploring the online reading comprehension strategies used by sixth-grade skilled readers to search for and locate information on the Internet. *Reading Research Quarterly*, 42(2), 214–257. doi:10.1598/RRQ42.2.2


RAND Reading Study Group. (2002). Reading for understanding: Toward an R&D program in reading comprehension. Santa Monica, CA: RAND.


Literature Cited


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