Teaching Content and Skills through Integrated Literacy Circles

Karen D. Wood, Paola Pilonieta, & William E. Blanton

The professional literature abounds with discussions of the need to integrate reading skills with content area instruction (Blanton, Wood, & Taylor, 2007; Gavelek, Raphael, Biondo, & Wang, 2000; Moje, 2007; Jordan, Jensen, & Greenleaf, 2001; Wood & Blanton, 2009s; Wood & Muth, 1991). To this end, national organizations (International Reading Association and National Middle School Association, 2001; National School Board Association, 2006), state curriculum standards (Bacevich & Salinger, 2006) and national reports (Hubbard, Mehan & Stein, 2006; Heller & Greenleaf, 2007; Kirsch, Braun, Sum, & Yamamoto, 2007) advocate the value of integrated instruction as a necessary means of learning required subject area knowledge and concepts. Actually enacting this integrative process is yet another matter.

Consider the dialogue in the two different classroom scenarios illustrated in Figure 1. In Classroom A, the teacher tells the class in advance the meaning of the unknown word by citing a dictionary definition. Then, after the students have read the paragraph silently, the teacher asks the students a series of literal level, text-based questions about the passage content. To conclude the lesson, the teacher recites what the students should now know about the information in the passage. The teacher in this scenario attempts to teach the content of the lesson without helping students understand the language of the passage and how to read and fully understand the meaning of the passage. At no time are students asked to refer back to the passage for confirmation, and the entire lesson is dominated by teacher talk.

In Classroom B, the teacher has already pre-assigned the students to groups and tells them to use imagery to visualize the environment and farm life reflected in the paragraph. With their minds actively engaged in the text, the teacher uses a line of questioning and probing to help them understand the meaning of the target word, “subsistence,” continually referring them back to the paragraph to find support for their answers. For closure, the students work in groups to review the content learned in the lesson. Expanding the vocabulary portion of the lesson further, the teacher asks group members to think of or locate more words with similar word parts. This scenario illustrates a combination of teacher and student contributions using both small-group and whole-class formats. In other words, the teacher is teaching both the content of the lesson and how to read that content.

We maintain that developing an awareness of the skills and tasks involved in proficient reading is necessary in the middle grades and that success with these skills and tasks develops through peer interaction and meaningful activity, not through teacher-dominated discussion. To that end, in this column we introduce the integrated literacy circle (Blanton, Pilonieta & Wood, 2007), a discussion-based approach to teaching and learning content area concepts while simultaneously acquiring basic reading skills. We illustrate how a teacher facilitates this article reflects the following This We Believe characteristics: Students and teachers engaged in active learning — Multiple learning and teaching approaches that respond to student diversity — Organizational structures that support meaningful relationships and learning

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This We Believe characteristics: Students and teachers engaged in active learning — Multiple learning and teaching approaches that respond to student diversity — Organizational structures that support meaningful relationships and learning
this approach using excerpts from transcripts of two lessons that were taught in middle school classrooms. The first lesson was designed to help students identify cause and effect in a social studies passage, and the second lesson taught students to recognize and use context clues to identify obstacle words in a science lesson. However, note that integrated literacy circles can be used to teach and reinforce students’ understanding of any of the necessary literacy skills and tasks including predicting, sequencing, summarizing, skimming for main ideas, inferring, critical analysis, and text structure.

Defining the integrated literacy circle concept

An integrated literacy circle is a way for students to learn, apply, organize, and coordinate the skills and strategies needed for proficient reading. This concept is very similar to the reading circles prevalent in many elementary classrooms, where students are assigned to groups for a particular instructional purpose. When applied to the middle or secondary level classroom, the circle concept provides a way for teachers to engage students in a discussion of the topic and content under study while simultaneously teaching them how to apply a needed literacy skill. Consequently, the circles provide thinking with your group members and then share this with the class.

Student: It must be hard, since they don’t have modern machinery.
Teacher: Yes, and women carry water in big jugs.
Student: They probably still use oxen and animals to pull the carts.
Teacher: Take a look at the word subsistence and see if you can use the surrounding sentences to figure out the meaning.
Student: I think it has a negative view.
Teacher: Look back in the paragraph and tell us which sentences or phrases make you think that.
Student: Because it says they grow food only for family use. Then it talks about how they aren’t able to afford modern things.
Teacher: Is there a familiar word part in subsistence?
Student: “Sub,” like in substandard.
Student: Or in submarine.
Student: Like subsets in math.
Teacher: What do you think the prefix means?
Student: Below, underneath, low.
Teacher: Is there another familiar word part in this word?
Student: The word part “ist” makes me think of exist, which means to live.
Teacher: So, subsistence means what?
Student: To live below or beneath.
Teacher: Yes, the glossary says, specifically, subsistence means to remain alive (especially on food) on a minimum livelihood.
Teacher: Now, looking back at the paragraph, work in your groups to review three or more things we have learned about subsistence farmers in South Asia. See how many words your group can come up with similar to the word subsistence. Then we will share this information as a class. We will also talk about how using the context and looking at word parts can help us unlock the meanings of new words.

Figure 1 Classroom scenarios

Text Segment
More than three-fourths of South Asians live on small farms less than two acres, compared to the average U.S. farm which is more than 400 acres. The families living on these small plots of land are subsistence farmers who grow food only for family use. They are often too poor to have fertilizers, insecticides and modern farm equipment. Women still carry pots of water on their hips as they walk through the village. Most of the farmers use traditional carts and wagons to transport their crops.

Classroom A
Teacher: We are going to read about the farm villages in South Asia. There is a word in the first paragraph you probably don’t know. It is subsistence and it means a way of supporting life; a living or livelihood.
Teacher: Read the paragraph to yourself.
Teacher: What is the size of most South Asian farms?
Student: Two acres
Teacher: What is the size of most U.S. farms?
Student: More than 400 acres.
Teacher: What do they use to transport crops?
Student: Carts and wagons
Teacher: Who do they grow the crops for?
Student: Their families.
Teacher: So, we have learned that their farms are only two acres, they transport crops by carts and wagons, and they grow these crops for family use.

Classroom B
Teacher: As you read the first paragraph, try to imagine what life must be like in the farm villages of South Asia. Discuss your thinking with your group members and then share this with the class.
Student: It must be hard, since they don’t have modern machinery.
Student: Yes, and women carry water in big jugs.
Student: They probably still use oxen and animals to pull the carts.
Teacher: Take a look at the word subsistence and see if you can use the surrounding sentences to figure out the meaning.
Student: I think it has a negative view.
Teacher: Look back in the paragraph and tell us which sentences or phrases make you think that.
Student: Because it says they grow food only for family use. Then it talks about how they aren’t able to afford modern things.
Teacher: Is there a familiar word part in subsistence?
Student: “Sub,” like in substandard.
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a vehicle for teachers to scaffold the concepts to be learned while enabling peer groups to co-construct the information through discussion.

In a typical integrated literacy circles setting, the teacher assigns the students to small groups of five to eight to form reading skill circles. The teacher explains a particular reading task, skill, or strategy and thinks aloud to model the thought processes needed to accomplish the task. Students are then assigned a reading task to complete alone, with others, or with the assistance of the teacher; then they discuss the results with their peer group members. Students are encouraged to ask for help from the teacher and others when necessary. The text selected can be any length and from any source, online or traditional, as long as it is useful as a resource to learn the topic under study and can stimulate meaningful discussion. After the discussion, the teacher assigns students additional material to read, with the purpose of coordinating and applying the knowledge to accomplish the task independently. Instruction on the task culminates with the teacher coordinating a discussion of how the task knowledge “worked,” how it can be improved next time, and how it might be used in other contexts, both inside and outside of school.

The process of reading any given text becomes as important as the content being learned. This is not the case in Classroom Scenario A (see Figure 1), in which the teacher assesses comprehension through questioning but does not model or teach students how to understand the text. With integrated literacy circles, discussion surrounds not only the content under study, which is what typically occurs in classrooms, but also how to read and comprehend that content. Ideally, students interact with each other about the task and reading knowledge they used—any difficult words that posed problems or word meanings, concepts, ideas, and content that were challenging or unclear—then they share how their specific and personal interpretations of the text led to understanding. The majority of the discussion remains among the students, with the teacher monitoring from the background. Because students take ownership of the task and content, these reading lessons can be more meaningful and increase the likelihood that students will transfer their reading knowledge to other reading situations.

The phases of instruction

The integrated literacy circles approach involves seven phases of instruction: exploration, explication, translation, modeling, guided practice, application, and closure (Blanton, Pilonieta, & Wood, 2007; Blanton, Moorman, & Wood, 1986). These phases are defined and illustrated below using excerpts from transcripts of lessons taught by two middle school teachers, Lina Soares and Kendall Kiser. Lina was teaching her students the skill of cause and effect as they learned about desertification in social studies class. In Kendall’s science class, the major focus is on understanding context clues. Although the integrated literacy circle can be conducted with narrative texts, these examples use information texts, thereby maximizing opportunities for students to acquire reading knowledge while learning subject matter. Please note that in these examples students are being introduced to the particular reading task and related knowledge for the first time, so they involve more teacher talk than would be the case when students are assigned to their groups for guided practice.
Exploration phase
During the exploration phase, the teacher elicits and probes students’ prior knowledge about the reading task to be performed, as Lina did in her lesson on cause and effect.

The purpose of the lesson today is to learn about another important text feature called “cause and effect.” Cause and effect is one way an author organizes the writing to present the information in an orderly way. It is often used to teach social studies and science concepts. Who can tell me what they think cause and effect means? Why would it be important to understand this relationship?

Like Lina, Kendall used a series of questions to activate her students’ prior knowledge about using context clues to find the meaning of an unknown word.

- What are some things you already do to figure out the meaning of unknown words?
- What do you do when you come to a word you do not know in your science textbook?
- How do you know which words you must understand in your science textbook?
- Why is it important to know the meanings of certain vocabulary words?

Explication phase
During the explication phase, the teacher explains what is to be accomplished in the task knowledge dimension of the content lesson in terms of the three aspects of knowledge: 1. declarative knowledge (what the task is), 2. procedural knowledge (how the task is completed and with what knowledge), and 3. conditional knowledge (when the knowledge can be applied and why). During this phase, the students begin to become aware of the strategies and tasks needed to become better readers as they internalize the language used in literacy.

Lina began by introducing the concept of cause and effect in terms the students could understand.

Cause and effect is the relationship between two things when one thing makes something else happen. For example, if it is raining outside, we use an umbrella. Raining is the “cause;” using an umbrella is the “effect.” Writers use the structure to show order, inform, speculate, and change behavior. Whether you realize it or not, you use cause and effect every day to solve problems and make decisions.

Next, Lina outlined the basic procedure for recognizing cause and effect relationships. She provided a handout explaining four strategies for identifying cause and effect:

1. Look for stated cause and effect relationships.
2. Look for unstated cause and effect relationships.
3. Look for signal words.
4. Look for effects that are also causes.

She also taught students how to use the information on the handout, and she gave them an opportunity to practice.

For today, the first thing you need to do is to look at the hand-out I have given you. While you are reading, look to see if you can identify cause and effect relationships. If it is a stated cause and effect, it will probably be easier to find. If it is unstated, it may be a bit more difficult. Look for signal words (because, so, so that, if ... then, consequently, as a result) that you can use to help you identify these relationships. It might be helpful to circle the signal words while you locate the causes and effects, or you could put a C over the cause and an E over the effect. This may help you keep the relationship between ideas clear.

Finally, Lina provided conditional knowledge, explaining to her students when and why they would analyze the cause and effect structure of a text.

The cause and effect structure of text gives reasons and explanations for events, conditions, or behavior. Looking for the reason why things happen, such as...
cause and effect, is a basic human compulsion. So, understanding the cause and effect text structure is essential in learning the basic ways the world works. Knowing this text structure will help you understand important concepts in social studies and science.

**Translation phase**
As the name implies, the teacher asks students to translate, or explain, the task in their own words. In this way, the teacher can judge how well students are interpreting and understanding the language needed for comprehending the task. For example, Lina asked her students, “Using your own words, who can tell me what a cause and effect relationship is? Why would knowing this text structure be important and helpful to you? Who can give me an example?” Similarly, Kendall asked,

In your own words, who can tell me how you figure out the meaning of an unknown word? How do you know what the vocabulary words are in your textbook? How do you do a structural analysis of a word? How do you use context clues? Why would you need to use a glossary? Why would you need to use a dictionary? Tell me when you could use these three strategies to help you figure out the meaning of an unknown word.

In both cases, the teachers used carefully crafted questions to encourage their students to translate what they had learned in their own words.

**Modeling Phase**
The teacher models and demonstrates, by thinking aloud, how the knowledge is coordinated to complete the task. This process makes implicit thinking processes explicit. Lina modeled the process of recognizing cause and effect in the following way.

For practice, let’s try it! I have written some examples on the board of cause and effect showing the relationship between two things when one thing makes the other thing happen. If I can put two things into a sentence using “if … then …,” I have the requirements for cause and effect. Here are some examples I have written.

- Save money → travel abroad
- Eat too much → gain weight
- Study politics → become a lawyer
- Stay out in the sun too long → get a burn

As you can see, I am able to insert “If … then”; therefore, I have met the requirements for cause and effect. Now, look again at the handout I have given you on desertification. Following is a read aloud from the overhead projector and note how I locate the causes and effects. It might be helpful to write C above the cause and an E above the effect. Or, you might want to use your markers and color-code the

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**Figure 2** Student reaction/reflection form for integrated literacy circles

<table>
<thead>
<tr>
<th>Explanation</th>
<th>The explanation helped us think about the relationships we read about in our textbooks. The explanation made us think out loud “what happened and why.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedures</td>
<td>The procedures we liked the most were highlighting and hunting for the signal words that alerted us to cause and effect.</td>
</tr>
<tr>
<td>Teacher Modeling</td>
<td>When our teacher modeled for us, it gave us a visual. The combination of seeing and copying what our teacher said and did, really gave us the fundamentals of cause and effect.</td>
</tr>
<tr>
<td>Guided Practice</td>
<td>Guided practice was the most helpful. We were able to identify even more examples of cause and effect while working together. It really helps to have another person who may see the relationship and then can help explain.</td>
</tr>
<tr>
<td>Application</td>
<td>This practice helped us because now we are able to see in our reading that there are concepts that talk about something happening and now we know to look for why.</td>
</tr>
</tbody>
</table>
cause and effect in each example. But you may copy what I do.

Kendall modeled the process of finding the meaning of an unknown word using examples from the science textbook.

Let’s try an example from the text. The textbook says, “All of the organisms that live together and interact with each other make up the biotic part of the environment” (Holt Science & Technology, p. 534). Let’s first do a structural analysis of the word biotic. I know that the prefix bio means life, but I still do not know what the word means. Next, I’ll look at the clues in the sentence and before and after the sentence. Biotic could mean things that live in the environment. Now, let me look up the meaning of biotic in the glossary. The glossary says, “Describes living factors in the environment” (p. 712).

It is not always necessary to use all three strategies. Let’s look at the following example: “Ecology is the study of the interactions of organisms with one another and with their environment” (Holt Science & Technology, p. 534). All three strategies could be used, but context clues seems the most appropriate since the word is defined in the sentence. However, if the sentence read “The ecologist is examining the relationship between fish and the rising number of plankton,” we may need to use more than one strategy. Through structural analysis we learn that there are three parts to the word: eco, ology, ist. We remembered from our biology example that ology means “the study of.” From the commercials they have been showing on TV, we think that eco may have something to do with eco-friendly, which has to do with the environment. We put this information together, and we can guess that an ecologist may study the environment. By looking at the context clues, we see that our guess is confirmed. If we need final confirmation, we can always check the glossary in our book.

Guided Practice Phase

After feeling comfortable that the students understand the integrative task that relates to the content under study, the teacher assigns students to work with partners or small groups to coordinate and enact the knowledge to accomplish the reading task. Each student’s verbalizing of the thinking processes affects the thinking processes of the group, making learning evident to the teacher/observer. Lina’s students worked in pairs to practice recognizing cause and effect. Kendall instructed her students to engage in guided practice in the following way.

Read the section on photosynthesis (Holt Science & Technology, p. 570). Working with your group, use the three strategies we discussed today to figure out the meanings of the three vocabulary words. First, you will want to complete a structural analysis of the word. Then, note any context clues that aided you in figuring out the meaning. Last, look at the glossary or dictionary to compare your meaning to the one in the textbook. Each group will share their vocabulary words and explain how they figured out the meanings.

Application Phase

In this phase, the teacher asks the students to independently accomplish the task they completed in the previous phases using new, but similar, material. Both Lina and Kendall designed web-based activities during which their students could apply what they had learned. Kendall gave the following instructions to her students.

Today we have been talking about how to find the meaning of unknown words. I want you to apply this strategy to the reading on the Real Trees 4 Kids Web site (http://www.realtrees4kids.org/sixeight/letseat.htm). The reading will continue our study of photosynthesis. As you read, you will apply the steps we discussed in class to figure out the meaning of the unknown vocabulary words. First, you need
to do a structural analysis of the four words. Then, make note of any context clues you used to figure out the meaning. Last, use the online glossary from the Web site to see if you were able to figure out the meaning of each word using the structural analysis and context clues. Once you finish, you will discuss how the strategies helped you figure out the meaning of the unknown words.

During the week, I would like you to find 3 or 4 examples of vocabulary words from another class. Write down the strategies you used to figure out the meaning of each unknown word. Then, you should verify your definition against the glossary.

**Closure Phase**

To culminate the lesson, the teacher asks the students to summarize what they have learned about performing the target task—both the literacy skill and the content material. With teacher prompting, students discuss the knowledge they used and their understanding of how it was used. Here, they synthesize the contributions of other group and class members and revise their understanding of the task and how they might perform it better next time. For example, in Kendall’s class, students worked in groups to share vocabulary words they encountered in other classes, and they explained to each other the steps they used to figure out the meanings.

To help students reflect on how the lesson phases helped them understand both the content area concepts and the skills needed to fully comprehend those concepts, teachers can give them a Student Reaction/Reflection Form shown in Figure 2. A reflection form does not need to be completed each time an integrated literacy circle is conducted; however, it is helpful when a new skill is being introduced. Reflecting on the process and on the information learned will highlight key information for students, which, in turn, will help them remember the information more easily.

**Summary**

In this column, we have illustrated how integrated literacy circles can be used to teach both content and skills simultaneously to help students develop, expand, and improve the fundamental skills and tasks associated with proficient reading. Using a solid, scaffolded model of instruction such as the one shown here, and borrowing from the elementary level circle model of instruction, middle grades teachers can teach the necessary literacy skills without marginalizing their teaching of subject matter content.

**References**


[91x560]Write down the strategies you used to figure out the

[91x583]examples of vocabulary words from another class.

[91x640]out the meaning of each unknown word using the structural

[91x663]meanings.

[91x629]verify your definition against the glossary.

[91x686]improve the fundamental skills and tasks associated


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[329x647]model of instruction such as the one shown here, and

[329x318]International Reading Association and National Middle School


[342x399]Literacy instruction in

[342x439]Reading Psychology, 28

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[498x339]Reform as learning.

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