DIFFERENTIATED INSTRUCTION

Making Informed Teacher Decisions

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This article provides an inside look at two classrooms where focused assessment and tailored instruction are key to differentiation.

In schools across the country, teachers and administrators grapple with the complexities of differentiating instruction for students whose literacy needs, interests, and strengths vary widely. Although the notion of differentiating instruction is not new, it has become increasingly important in schools where large numbers of students are not achieving the highest levels of literacy.

For example, Lincoln School District (pseudonym), a large, urban school system with low districtwide reading scores, was mandated to establish a more comprehensive vision for its reading program. District administrators selected a core reading program to be used in all schools and allocated longer blocks of time for whole-class instruction, small-group differentiated instruction, and independent learning. In this district, and others where students consistently score lower than do students in more affluent school settings, the need for further differentiation is pitted against the realities of limited teacher time and the need for more knowledge about how to differentiate instruction to meet the variability in student needs.

The following comments, heard recently in schools, may sound familiar:

- The basal gives us models, materials, and methods to differentiate instruction for all students; isn't that enough?
- I thought the whole point of using research-based instructional strategies was to be more effective with my students. I'm unclear on what more I should be doing.

Meanwhile, administrators and professional development facilitators state: We know that teachers and students need more direction than core reading programs can provide to help students who struggle in reading. How can we support our teachers?

In this article, we address the concept of differentiation by investigating what it means, the research base supporting it, what it can look like in both primary and intermediate-grade classrooms, and the teacher decision making behind it. We begin

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by examining the following questions: What does differentiation mean? Why is it important? What does the extant research suggest about what works for differentiation?

What Is Differentiated Instruction?

Differentiated instruction allows all students to access the same classroom curriculum by providing entry points, learning tasks, and outcomes tailored to students' learning needs (Hall, Strangman, & Meyer, 2003). Differentiated instruction is not a single strategy, but rather an approach to instruction that incorporates a variety of strategies. In other words, differentiation is responsive instruction designed to meet unique individual student needs. As Tomlinson (2001) stated, differentiating instruction can occur by focusing on *the process* by which students learn, *the products or demonstrations* of their learning, the *environment* in which they learn, or *the content* they are learning.

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In our view, differentiating the process by which students learn, the products or demonstrations of their learning, the environment in which they learn, or the content they are learning is not a mutually exclusive exercise. In fact, we suggest there is often important reciprocity among Tomlinson's four differentiation dimensions during literacy instruction.

For example, grouping students appropriately for reading instruction is a key component of the learning environment; however, it can also create a process of literacy learning that is social and collaborative. Furthermore, working with students in small groups is often aligned with differentiated content or products of instruction. The same is true for text selection. Students should always be reading texts worth reading. Hence, differentiation of the environment, processes, or products could be the result of offering appropriate text as the content of literacy instruction.

For example, when students engage with differentiated text, their literacy environment may encourage greater risk taking, thereby causing the teacher to alter the processes or products based on students' engagement. Therefore, given the dynamic nature of literacy instruction, it is important to keep in mind that the four dimensions of differentiation (Tomlinson, 2001) could, and indeed sometimes should, affect one other.

Why Is Differentiated Literacy Instruction Important?

As research was conducted over the past decade about how children learn to read, correlational evidence consistently showed that some types of instruction were more effective for some students and less effective for others (Juel & Minden-Cupp, 2000). More recently, school-based research studies have been conducted in which teachers were randomly assigned to either differentiate reading instruction based on students' reading and vocabulary skills or to provide more effective, but not differentiated, instruction during their literacy block (Connor, 2011).

These studies showed that from kindergarten through third grade, students made greater gains in word reading and reading comprehension when their teachers differentiated instruction, using small, flexible learning groups during a center or station time, than did students whose

Pause and Ponder

- One dimension of differentiation is in-depth knowledge of the reading process and the evidence base for reading instruction. What areas of reading development do you feel most comfortable with and know the most about? If you were to begin differentiating, where would be a good place to start?
- How do you allow students to demonstrate their knowledge? How might you use your knowledge of your students' cultural and linguistic differences to plan and assess differentiated instruction that is responsive to their needs and builds upon their backgrounds and experiences?
- What supports your collaboration with colleagues? What inhibits your collaboration with colleagues? Think of factors that are "systemic" as well as those that are specific to you.
- Many schools use published reading programs, core literacy curricula, or other materials to support literacy learning. How can the published program and differentiation coexist to the maximum benefit of your students?

teachers provided high-quality but primarily whole-class instruction. In these studies, the heart of effective differentiated instruction was understanding students' skill profiles and matching amounts and types of instruction to each profile. Valid and reliable ongoing assessments of students' reading and vocabulary skills were used to identify different student profiles, which changed over time. This research also revealed the importance of using ongoing assessments and truly understanding students' specific strengths and needs as they changed in response to effective literacy instruction.

Differentiated instruction is also central to honoring diversity. In his review of research on literacy and diversity, Tatum (2011) reported nine categories of diversity pertinent to literacy educators, including gender, ethnicity, language, race, socioeconomic status, and exceptionalities (physical, mental, emotional, intellectual), noting that "there are many interactions that can exist within and across each of the categories, and each is affected by dynamics of power and privilege" (p. 427). He stated that an important way to honor the multiple ways in which students are diverse is to offer appropriately differentiated instruction.

In his review, Tatum (2011) identified specific instructional recommendations, which include making connections between instruction and students' experiences, fostering student autonomy, making effective use of strategic grouping, and providing research-based cognitive strategy instruction. A truly differentiated classroom is one in which learners are understood to be constantly growing and changing as they participate in various literacy events.

Furthermore, particular ways of learning are not privileged over others. Instead, it is understood that children bring to school an array of valuable cultural and linguistic experiences that may be similar or dissimilar to those of the teacher or other children in the classroom (e.g., Terry & Connor, 2012). The idea that classrooms are fundamentally diverse in a variety of ways, including experiences with and achievement in school-based literacy, is in keeping with concepts underlying Response to Intervention (RTI), which blurs the lines between traditional notions of "mainstream" or "general" instruction versus "specialized" instruction.

Differentiation has drawn increasing attention since 2004, when reauthorization of the Individuals with Disabilities Education Act (IDEA) introduced RTI. RTI assumes that literacy teachers differentiate as a matter of course, within both the context of the general classroom (sometimes called Tier 1) *and* within the context of more specialized and targeted instruction/intervention (sometimes called Tier 2 and Tier 3).

According to the *Response to Intervention: Guiding Principles for Educators* (International Reading Association [IRA], 2010):

> Students have different language and literacy needs so they may not respond similarly to instruction, even when research-based practices are used. No single process or program can address the broad and varied goals and needs of all students, especially those from different cultural and linguistic backgrounds.

It further states: "The boundaries between differentiation and intervention are permeable and not clear-cut. Instruction or intervention must be flexible enough to respond to evidence from student performance and teaching interactions."

In an RTI framework, providing differentiated and responsive instruction is an important prerequisite to referring a child for special educational services. This is in direct contrast to earlier models in which differentiation may have been viewed as a special educational service to be provided only when children did not read as well as their cognitive abilities predicted (e.g., IQ) and comparisons with peers suggested they should. Thus students had to wait until their reading skills were seriously delayed before they could receive services. Unfortunately, many never caught up. With RTI, differentiated instruction can be provided to every student and, for some students, may prevent the development of long-term reading difficulties (Mathes et al., 2005).

Because every child learns differently, and every child *is* different, the most effective instruction is designed to fit each learner (Connor et al., 2011). When differentiation is viewed in this way, the role of the teacher as an informed decision maker is paramount. Although the sentiments conveyed by the quotes at

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the beginning of this article are not uncommon, the reality is that effective differentiation is not found in a basal series or even in a particular research-based instructional strategy. Rather, it is found in the decisions teachers make based on their understanding of the reading process, in-depth knowledge of their students, consideration of an array of effective instructional practices supported by research, and ability to select models, materials, and methods to suit particular students as they engage in particular literacy acts.

In the remainder of this article, we examine differentiated literacy instruction through specific classroom examples. (Names of teachers and students are pseudonyms.) In these two classrooms, one in Massachusetts and one in Pennsylvania, students with a range of needs and a variety of cultural experiences are participating in appropriately differentiated instruction. The first vignette explores differentiation using text selection and flexible grouping. The second describes differentiation using a continuum of graphic organizers to scaffold comprehension.

For each, we begin by presenting a snapshot of differentiation in action, then go behind the scenes to examine the teacher thinking and decision making that led to the examples shared, as well as the research that supports it. Finally, we present common characteristics of effective differentiation and ideas to stimulate your own growth in this area using the materials available in your classroom.

Differentiating Text Selection and Using Flexible Grouping in a Primary-Grade Classroom

Ms. Cooper, a third-year teacher, discussed *Puppy Mudge Makes a Friend* (Rylant, 2004) with four of her first-grade students. The children in this group, including Yvonne and Kentaro, who are English learners, had typically struggled to comprehend while reading simple beginning texts; now, in this group, they had the opportunity to read a book at an appropriate level for them while receiving specific comprehension instruction.

In this case, Ms. Cooper was teaching students how to engage with a text by calling forth their own experiences in relation to the characters and events of the story. Although generally useful for all students, this strategy would especially support Yvonne and Kentaro as English learners by helping them to make connections between the text and their own lives (Tatum, 2011).

Earlier that week, Ms. Cooper did a think-aloud while modeling the act of connecting personal experiences with text. On this particular day, using carefully constructed, open-ended questions, she encouraged a lively discussion. The questions she used to prompt the students' connections to the text included: What did you think about this story? Did any part make you smile or laugh? Did anything surprise you? Did the pets in this story remind you of anything?

By using appropriately leveled material, the students easily read this particular text, thus allowing more cognitive energy to be focused on making important connections as evidenced in shared details from their own lives that were related to those of the characters in the book.

"The dog in this book reminds me of my puppy," offered Ned. "She sometimes jumps on the furniture, too."

"His name is Mudge," added Brianna. "He plays hide-and-seek with the cat and he even licked her."

"My cat wouldn't let a dog do that. She would never play with a dog." Yvonne said.

"That's interesting," said Ms. Cooper. "Brianna noticed that, in the story, the cat was playing with the dog and letting it lick her, but Yvonne said that her cat wouldn't do that. What do you all think about that? How does Yvonne's piece of information about her cat—her *connection*—help us understand what's going on in this story?"

"If they are playing together, then maybe they are good friends!" said Brianna.

"Good thinking, Brianna." Turning to Kentaro, who had been quiet so far in the discussion, Ms. Cooper asked, "What do you think about that, Kentaro? Do you have a connection to this story?"

Kentaro shook his head.

Ms. Cooper continued, "Kentaro, what do you think about Mudge and the cat?"

Kentaro said softly, "The cat is nice. She is nice to the dog."

From this snapshot of the group's discussion, the teacher gleaned a bit more information about the students' strategy use and their understanding of the story. And although Kentaro

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was initially reluctant to participate, he benefited by being grouped strategically with only a few native English speakers in a less formal setting, which allowed him to listen to one student at a time and to occasionally share his own ideas.

In future lessons, it is important for Ms. Cooper to continue to encourage Kentaro and Yvonne to make connections to their own lives and to share their own experiences with their peers. She will also need to provide more opportunities for practice and extensive scaffolding so that all her students will be able to independently apply the strategy of making connections to deepen their understanding of the text.

In other areas of the room, other students were engaged in a variety of literacy tasks designed to meet their needs, too. Some worked in a small group with a reading specialist who came into the classroom each morning for 45 minutes, whereas others worked at various centers. Students who were not working with a teacher rotated through a selection of literacy centers such as magnetic word building on white boards, literature-response writing in a journal, leveled-book basket browsing, word-study practice at the computer, and partner reading for fluency.

These centers had been created and organized by Ms. Cooper as an integral component of her approach to differentiation, and they were carefully designed to provide differentiated learning experiences for her students. Some students were scheduled to visit a particular center several times during the week to increase their opportunities for practice, whereas other students visited that particular center only once or twice. At many stations, the activities themselves were varied to provide different learning experiences; for example, students worked on different groups of words at the magnetic word-building center or read texts of varying levels of difficulty with partners for fluency practice.

Meanwhile, in the period of a week, Ms. Cooper aimed to meet with each of her small groups three or four times, for 20-minute sessions. Setting up this schedule required a little trial and error, but over time and with growing experience, she established a routine that worked successfully and ensured that each child received effective small-group targeted instruction and had opportunities to engage in worthwhile literacy activities that met his or her own particular literacy needs. At any given moment, each child knew exactly what to do and where to do it.

After determining her grouping strategy and the classroom structure necessary to support it, Ms. Cooper carefully selected a number of texts that she thought were best suited for each group of students. From that set of books, Yvonne, Kentaro, Brianna, and Ned chose a book from the Puppy Mudge series by Cynthia Rylant. They were able to read this book independently with 99% accuracy, yet they needed support to understand it thoroughly. In other words, the book was easily decoded by the group, and because of this, it was the perfect choice for a focus on comprehension strategy instruction.

While they were learning to make connections with *Puppy Mudge*, a second small group of first graders who read books of slightly more difficult text complexity were applying the same comprehension strategy to the book they chose, *Small Pig*, by Arnold Lobel (1989). Other groups, too, were reading books with appropriate levels of text difficulty and learning to make connections to text to improve their comprehension. A third group, comprising six children, could read more complicated texts, and they were making connections while reading *My Name Is Yoon*, by Helen Recorvits (2003). Ms. Cooper had paired the fourth group with the book *Amazing Grace*, by Mary Hoffman (1991), which proved challenging enough for this group of particularly strong readers. By expertly matching the texts to the readers, Ms. Cooper had differentiated the text difficulty and specific content while providing the same intensive instruction on making connections to improve comprehension—the instructional content—for all her students.

Ms. Cooper knew, too, that her students were individuals who learned

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at different rates; therefore, she continuously evaluated her students' progress and considered their changing interests to keep her groupings flexible. Yvonne, Kentaro, Brianna, and Ned would not always read together in a small group. Ms. Cooper would carefully observe and document their progress and be prepared to rearrange the small groups frequently to match each child's changing strengths and needs. By keeping the groups flexible, Ms. Cooper provided truly differentiated instruction.

The Research and Decision Making Behind Ms. Cooper's Differentiation

Ms. Cooper's classroom reflects the ways in which differentiation can simultaneously focus on learning processes, products, environment, and content, and reflects the ways in which these dimensions of differentiation often interact. In this classroom, four groups of students were learning the same comprehension strategy (content)—making connections to text—although Ms. Cooper differentiated the texts (another aspect of content) with which they worked.

Ms. Cooper determined that small-group instruction was important and therefore created an overall classroom learning environment to support this endeavor. In so doing, she created differentiated learning centers that allowed students to work independently on aspects of reading and writing tailored to their needs. The quality of verbal interactions and scaffolding (learning process) within the small group would not have been possible without Ms. Cooper's attention to other aspects of differentiation.

A further look at this example of Ms. Cooper's differentiation reveals several powerful elements of her decision-making process. There are a number of studies that provide evidence that Ms. Cooper's instructional strategies are likely to be effective. These include studies on using assessment to guide instruction and the use of small flexible learning groups (Connor et al., 2011; Elleman, Compton, Fuchs, Fuchs, & Bouton, 2011; Mathes et al., 2005). Here, we focus on two of them: *dynamic assessment* and *evidence-based practice*.

Dynamic Assessment. Ms. Cooper was a master at dynamic assessment; she focused her efforts on learning as much as she could about each child—about how the child reads and learns, what that child does well, and what he or she needs to learn next—to achieve the high level of literacy expected of all students in her classroom.

Ms. Cooper learned as much as possible about her students and the ways that they learn best. She achieved this by gathering data from district assessments, by observing the children closely as they worked, and by asking them questions about their thinking and their methods for decoding unfamiliar words and solving problems. She found that one of the best ways to learn about her students was to conduct running records while they read self-selected texts. She also examined the kinds of errors and miscues her students were making and how they self-corrected (Clay, 2000). After checking for accuracy and fluency in this manner, Ms. Cooper followed up with some careful questioning to determine her students' comprehension and motivation while reading particular passages.

After she gathered all these data about her students, Ms. Cooper analyzed them to find patterns of learning strengths and needs. As she studied her records, combined with more formal assessment results, she began to notice patterns about the way the children were learning. After determining her students' reading levels, she was better prepared to provide them with appropriate texts that they could read without struggling. This information, combined with knowledge about the students' specific reading behaviors, helped Ms. Cooper take the next step: selecting a grouping strategy.

Evidence-Based Practice. More and more evidence has pointed to the importance of balancing whole-class instruction with small-group configurations (Wharton-McDonald,

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Pressley, & Hampston, 1998). Therefore, Ms. Cooper preferred to keep her whole-class literacy instruction to a minimum, using that time primarily for interactive read-alouds and brief minilessons on targeted topics. This decision led Ms. Cooper to provide the bulk of the instruction for her students individually or in small groups.

As she reviewed the data she had collected, she quickly noticed which students could be grouped together because they read at similar levels and had similar learning needs (e.g., comprehension). The students described earlier were decoding at a common level of difficulty, and they all demonstrated a need to improve their comprehension. Ms. Cooper decided to put these four students in a group for several days while she provided them with texts at their reading level and offered the specific comprehension strategy instruction (i.e., making connections) that she thought would help them best.

In fact, Ms. Cooper noticed that most children in her class would benefit from learning how to make connections and improve their understanding of the text; therefore, the rest of the students were similarly arranged, with four to six children in a group, according to their reading levels. Although the groups were reading different material, they all received instruction about how to make connections to improve comprehension. Finally, Ms. Cooper knew these groups could not be stagnant: She rearranged the children every few weeks according to their reading progress and their shifting literacy needs and strengths.

Ideas to Apply

There are several ideas gleaned from Ms. Cooper that can be applied in other classrooms.

- Assess students carefully and regularly using a variety of formative assessment tools, then analyze resulting data to determine patterns of need and group students accordingly. Ms. Cooper incorporated running records into her classroom routine and blocked off time weekly to revisit grouping configurations so as to truly be flexible and fluid in her grouping arrangements.
- Decide on a differentiation strategy. Modify the process, the materials, the environment, the product, or a combination of these. Ms. Cooper used grouping that was flexible and varied, plus a variety of texts, to offer a range of environments for learning and materials that best suited the strengths, needs, and interests of groups of students.
- Organize the literacy block to accommodate small groups of children learning together. Ms. Cooper daily provided specific reading instruction in these small groups.
- Match texts to readers, including text that is part of the core curriculum. Ms. Cooper had several ways of doing this. At times she used running record data to form homogeneous groups for instruction such as in the scenario described previously. At other times, she allowed the children to choose which texts to read and asked them to explain why they chose their books. This helped engage these young readers. And whenever possible, she used a combination of these approaches by providing a choice between two similarly leveled texts.
- Use a gradual release of responsibility model in teaching. The conversation among Yvonne, Ned, Brianna, and Kentaro was the result of several days of preparation, during which Ms. Cooper gradually released responsibility to her students. Before the discussion described here, Ms. Cooper did a think-aloud, gave examples, and modeled how to make connections when the text was implicit. After having students connect the ideas depicted in the text to their own experiences, Ms. Cooper moved them to making connections with other texts.

Differentiating Using a Continuum of Graphic Organizers in an Intermediate Classroom

Mrs. Manley is in her 15th year of teaching in a fourth-grade classroom. Her students represent a range of literacy achievement, including a group of four children receiving reading intervention from a reading specialist and two students who receive gifted services. In addition, there is one child with a moderate hearing loss and three students with specific learning disabilities.

After reading two informational passages from *Wild Babies* by Seymour Simon (1998), Mrs. Manley's fourth

graders compared and contrasted emperor penguins and giraffes. After discussing the passages and identifying attributes used to compare and contrast two seemingly very different animals (e.g., where they live, number of babies, type of birth, and protection of young), the children were asked to independently construct a paragraph summarizing their similarities and differences. All her students constructed a comparison–contrast paragraph, although they used different supports in the process. In this case, Mrs. Manley provided a continuum of differentiated graphic organizers based on variation in student needs. *Text maps*, *pattern guides*, *retelling pyramids*, and *question guides* (Marinak & Gambrell, 2008) were used to provide increasing levels of support.

Mrs. Manley selected graphic organizers for each student based on formative data collected during previous writing workshops, including prompt-specific rubric scores from a variety of brief constructed responses. These scores allowed Mrs. Manley to identify the amount of language support needed to construct a summary, with lower rubric scores indicating the need for a more intensive linguistic scaffold.

An example of a set of rubric scores for Andrew is found in Figure 1. The prompt asked him to compare and contrast the brown bat and the California leaf-nosed bat. Andrew had difficulty providing accurate text support details and appropriate signal words. As a result of Andrew's performance on this prompt, Mrs. Manley provided him with a question guide to scaffold comparing and contrasting the emperor penguin and giraffe.

Some of Mrs. Manley's students were able to construct their compare/contrast paragraph using a text map, which provides a visual representation of both the important concept from the text and the informational text structure (Armbruster, Anderson, & Ostertag, 1987; Duke & Pearson, 2002; Neufeld, 2005; Vacca & Vacca, 1999). Mrs. Manley used a text map because it scaffolds comparing and contrasting more deliberately than a Venn diagram, because it requires the identification of the attributes that will be used to compare and contrast (Marinak, Moore, & Henk, 1998).

For students who needed support beyond the text map, Mrs. Manley

Figure 1 Andrew's Performance on a Prompt-Specific Rubric

Prompt for***: Zipping, Zapping, Zooming Bats*** by Ann Early

After rereading *Zipping, Zapping, Zooming Bats* including the extended glossary, compare and contrast the brown bat and the California leaf-nosed bat. Be sure to include information about the attributes location, prey, hunting, and habitat. Support your answer with two comparing text support details and two contrasting text support details.

	3	2	1	0	Andrew's Score
Introduction	The introduction is accurate	The introduction is somewhat accurate	The introduction is inaccurate	The introduction is missing	2
Compare	The response provides two accurate comparing text support details	The response provides one accurate comparing text support detail	The response provides inaccurate comparing text support details	The response does not include comparing text support details	1
Contrast	The response provides two accurate contrasting text support details	The response provides one accurate contrasting text support detail	The response provides inaccurate contrasting text support details	The response does not include contrasting text support details	1
Signal Words	The response contains three- four accurate signal words	The response provides two-three accurate signal words	The response provides inaccurate signal word	The response provides no signal words	0
Conclusion	The conclusion is accurate	The conclusion is somewhat accurate	The conclusion is inaccurate	The conclusion is missing	1

Performance Criteria
3= Proficient
2=Basic
1 and 0= Below Basic

provided a pattern guide. Figure 2 shows a pattern guide for emperor penguins and giraffes. Pattern guides include several pieces of important information that have been strategically selected to illustrate the structural pattern being taught. This pattern guide provides one major idea, two attributes, a comparative supporting detail and a contrasting supporting detail. This pattern guide is very similar to the text map discussed previously. In fact, the text map uses the same organizational template, but does not include the scaffolding effect of a sample idea, detail, and attribute written in the appropriate text boxes.

For students who needed more language support to construct their paragraph, Mrs. Manley provided a retelling pyramid. A retelling pyramid (Pressley, 1989) scaffolds students by providing additional text language support, as shown in Figure 3. The prompts, written by Mrs. Manley and another teacher on the fourth-grade team, are a combination of questions and statements. After completing the pyramid, students use the rich linguistic scaffold to support discussion and paragraph writing.

Finally, several of Mrs. Manley's students, including Andrew, required a more explicit question–answer scaffold to compare and contrast the emperor penguin and giraffe. A question guide offered significant linguistic structure by providing the question, same/different choice, and the necessary signal words to create a sentence (Hall, Sabey, & McClellan, 2005). As Mrs. Manley's students answered the questions, they wrote full sentences that can be used to construct the summary paragraph. A sample question guide for one of the attributes is found in Figure 4. The sentence under the question matrix was written by the student after answering the guiding question. After completing a question guide for the four attributes, sentences of compare and contrast were discussed in pairs, written individually, and then shared with the whole class.

Using a continuum of differentiated graphic organizers, all the students in Mrs. Manley's class were able to discuss the similarities and differences between Emperor penguins and giraffes and construct a summary paragraph using four important attributes from the text.

The Research and Decision Making Behind Mrs. Manley's Differentiation

Mrs. Manley did not differentiate the *product* of instruction, which was a summary paragraph including similarities and differences gleaned from an informational text. She differentiated the *process* of instruction, which allowed students to get to the final product in a variety of ways. Mrs. Manley's differentiation is marked by evidence-based practice, ongoing assessment, and gradual release of responsibility, as was Ms. Cooper's in the previous vignette. Additionally, her differentiation is characterized by *collaboration with colleagues* and a focus on some of the key *components of text structure*.

Collaboration With Colleagues. Mrs. Manley's school district incorporates a model of intentional practitioner collaboration and

Figure 2 Pattern Guide for *Wild Babies* by Seymour Simon

Compare / Contrast

Major Idea		Major Idea
		Emperor Penguin
Supporting Details	**Attributes**	**Supporting Details**
Africa	Live	
	Type of birth	Egg

Adapted from Marinak, B. & Gambrell, L. (2008). Elementary informational text: A research review. *The International Journal of Learning*, *15*(9), 75–83.

Figure 3 Retelling Pyramid for *Wild Babies*

one

How many babies do giraffes and Emperor penguins have at a time?

Antarctica Africa

Use two words to describe where the Emperor penguin and giraffe live.

egg live birth

In three words, list how the giraffe and Emperor penguin have babies.

cared for in kindergartens

In four words, describe how giraffes and Emperor penguins protect their babies.

Figure 4 Compare and Contrast Question Guide for *Wild Babies*

Animals	How many babies does the animal have?	
	one	more than one
Giraffe	X	
Penguin	X	

Giraffes and penguins are: (the same) different

How?

Both giraffes and penguins have one baby at a time.

Compare and Contrast Signal Words: but, similar, both

Adapted from Marinak, B. (2008). Teaching the predictable nature of informational text. *Education for a Changing World,* 15–26., Corpus Christi, Texas: Texas & M University.

job-embedded professional development. As a result, she and her colleagues, including the school's reading specialist, have the time and space to work collaboratively on a regular basis. Preceding the lesson described earlier, the collaborative conversations among the teachers and specialists on the intermediate-grade team had been focused on effective instruction using informational text.

Conversations with the reading specialist enhanced Mrs. Manley's understanding of the importance of sharing a wide variety of informational text with her students, as well as her understanding of the ways in which many students struggle to comprehend nonfiction (Dymock, 1998; Williams et al., 2005). The group of educators listened as Ms. Manley described the range of needs of her students, and together they came up with the arrangement of the continuum of organizers used to graphically represent text ranging from affording students minimal support to providing a more explicit and sequenced scaffold. As a team, they have become much more adept and efficient in reviewing formative data and helping each other to provide each student with the graphic organizer that is the best match for his or her needs.

Focus on Text Structures. Mrs. Manley selected her graphic organizers based on her understanding of the importance of teaching informational text structures (Williams et al., 2005; Williams, Stafford, Lauer, Hall, & Pollini, 2009). Consistent with her state's standards and the Common Core Standards (2010), she chose to focus on the four most frequently used structures in elementary informational text (i.e., enumeration, time order, compare and contrast, cause and effect) (Neufeld, 2005; Richgels et al., 1987) and used graphic organizers to support student learning of these structures. Specifically, the preceding example illustrates differentiation for one of these structures—compare and contrast.

Ideas to Apply

The following ideas from Mrs. Manley can be applied in other classrooms.

- Clearly define the outcome students should accomplish. In this case, Mrs. Manley's outcome was the construction of a compare–contrast paragraph.
- Look carefully at your formative data to determine each student's strengths and needs relative to the desired outcome. Mrs. Manley used a collection of rubric-scored constructed responses housed in her students' literacy portfolios to guide her decision making.
- Carefully describe the range of student needs. Mrs. Manley jotted notes about each student as she reviewed their portfolios. She paid careful attention to the scaffolds used during previous constructed responding.
- Consider the array of differentiation strategies you might use to scaffold your students toward the outcome. Mrs. Manley collaborated with her colleagues to design the continuum of graphic organizers used for writing.
- Offer differentiation that is consistent with individual student needs. In other words, Mrs. Manley carefully matched the graphic organizer scaffold to each student based on her analysis of need. The graphic organizers were discussed with students individually during reading/writing conferencing.

Common Characteristics of Effective Differentiation

We have shared examples of successful differentiation in two settings, along with a look at the research and teacher decision making that enabled this success. As you think about the ideas presented in relation to your own instruction, it may be useful to consider some of the common characteristics of effective differentiation. In our experience, successful differentiation is characterized by:

- In-depth knowledge of students' literacy needs—both reading and oral language—as well as their strengths and interests. This includes valid, reliable, and instructionally useful

TAKE ACTION!

1. Select one intriguing idea discussed in this article to try out with some of your students. It may be Ms. Cooper's idea of adjusting the level of text to support learning of a specific strategy or the idea of using a continuum of learning guides to support the same key concept, as Mrs. Manley demonstrated.

2. Think of a specific skill or strategy you are currently teaching and analyze your instruction for elements of the gradual release of responsibility. In what ways do you begin to meet your students where they are and then gradually, and systematically, release your responsibility while increasing their responsibility so that they become independent and strategic in their use of that skill or strategy? Depending on the specific skill or strategy you are teaching (especially if it is a strategy), this process may take weeks or months and may require coordinating efforts with other instructional staff (e.g., reading specialist, paraprofessional) or classroom volunteers. How can you harness all resources to continually use a gradual release of responsibility model in your teaching?

3. Make a list of the types of data you typically use to make instructional decisions. How much of these data are classroom based and provide you with a direction for your instruction (as opposed to simply indicating a need for further or different instruction)? What types of data do you need to make better instructional decisions for your students? How can you, or you and other instructional professionals working together, efficiently gather those data on a regular basis?

4. Take the time to design an instructional schedule that allows you to visit with each of your students one on one, or in small groups, at least once each week. If this is too daunting, begin by aiming for once every two weeks. What elements of the school day can you manipulate to make this time available? How can you adjust the structure of your classroom to support this valuable time?

5. Develop a plan to use in evaluating the extent to which students' cultural and linguistic differences are integrated in your plans for differentiated instruction. To what extent might grade-level differences and classroom demographics influence the development of such a plan?

6. Put the topic of differentiation on the next agenda of your professional learning community or team planning meeting. As a start, ask everyone to read this article and come prepared to talk about what it means for instruction in your school. Then make a plan to support further collaboration in this area.

assessments of all children, as well as assessments of how children respond to instruction.

- Methods to monitor students' progress so that groupings and instructional strategies can be modified as students gain important skills and knowledge.
- In-depth knowledge of the reading process and evidence/research-based practices associated with instruction and assessment. This includes design and appropriation of materials, including those from your core literacy curriculum, that can accommodate the varying learning needs of individual students and gradually releasing responsibility for learning back to students.
- Use the core literacy curriculum more flexibly and creatively than the publisher recommends. For example, select reading materials from different parts of the core—for example, materials designed for the beginning of the year may not be challenging enough for some students and too difficult for others; for them, more time in basic skills might be warranted. The anthologies frequently offer text that follows similar themes but offer different reading challenges. These can be useful for differentiating instruction when using small groups.
- Emphasis on teaching components of strategic reading. Differentiation is used to support all students in the acquisition of the highest levels of literacy.
- Development of "systems" or routines to support differentiation. This includes developing classroom routines and systems that allow children to work in small peer groups and independently while the teacher provides targeted instruction to a small group of students.

Although there are many ways to differentiate instruction, the needs, interests, and strengths of students within specific instructional contexts guide decisions about how best to differentiate at a given point in time.

We hope the examples of differentiation examined in this article serve as a catalyst both for classroom teachers, who are called upon to make informed decisions about differentiation in their daily work with students, and for literacy coaches, professional development facilitators, and administrators, who are called upon to support classroom teachers in this critical endeavor.

REFERENCES

Armbruster, B.B., Anderson, T.H., & Ostertag, J. (1987). Does text structure/summarization instruction facilitate learning from expository text? *Reading Research Quarterly, 22*(3), 331–346. doi:10.2307/747972

Clay, M. (2000). *Running records for classroom teachers*. Portsmouth, NH: Heinemann.

Common Core State Standards Initiative. (2010). *Common core state standards for English language arts & literacy in history/social studies, science, and technical subjects*. Washington, DC: National Governors Association Center for Best Practices and the Council of Chief State School Officers.

Connor, C.M. (2011). Child by instruction interactions: Language and literacy connections. In S.B. Neuman & D.K. Dickinson (Eds.), *Handbook on early literacy research* (3rd ed., pp. 256–275). New York: Guilford.

Connor, C.M., Morrison, F.J., Fishman, B.J., Giuliani, S., Luck, M., Underwood, P., et al. (2011). Testing the impact of child characteristics X instruction interactions on third graders' reading comprehension by differentiating literacy instruction. *Reading Research Quarterly, 46*(3), 189–221.

Duke, N.K., & Pearson, P.D. (2002). Effective practices for developing reading comprehension. In A.E. Farstrup & S.J. Samuels (Eds.). *What research has to say about reading instruction* (3rd. ed., pp. 205–242). Newark, DE: International Reading Association.

Dymock, S. (1998). A comparison study of the effects of text structure training, reading practice, and guided reading on reading comprehension. In T. Shanahan & F.V. Rodriguez-Brown (Eds.) *47th Yearbook of the National Reading Conference* (pp. 90–102). Chicago, IL: National Reading Conference.

Elleman, A.M., Compton, D.L., Fuchs, D., Fuchs, L.S., & Bouton, B. (2011). Exploring dynamic assessment as a means of identifying children at-risk of developing comprehension difficulties. *Journal of Learning Disabilities, 44*(4), 348–357. Medline doi:10.1177/0022219411407865

Hall, K., Sabey, B., & McClellan, M. (2005). Expository text comprehension: Helping primary-grade teachers use expository text to full advantage. *Reading Psychology, 26*(3), 211–234. doi:10.1080/02702710590962550

Hall, T., Strangman, N., & Meyer, A. (2003). *Differentiated instruction and implications for UDL implementation*. National Center on Accessing the General Curriculum. Retrieved March 22, 2012, from www.k8accesscenter.org/training_resources/udl/diffinstruction.asp

International Reading Association. (2010). *Response to intervention: Guiding principles for educators*. Newark, DE: International Reading Association.

Juel, C., & Minden-Cupp, C. (2000). Learning to read words: Linguistic units and instructional strategies. *Reading Research Quarterly, 35*(4), 458–492. doi:10.1598/RRQ.35.4.2

Marinak, B., & Gambrell, L. (2008). Elementary informational text: A research review. *The International Journal of Learning, 15*(9), 75–83.

Marinak, B., Moore, J., & Henk, W. (1998). *Reading instructional handbook*. Harrisburg, PA: Pennsylvania Department of Education.

Mathes, P.G., Denton, C.A., Fletcher, J.M., Anthony, J.L., Francis, D.J., & Schatschneider, C. (2005). The effects of theoretically different instruction and student characteristics on the skills of struggling readers. *Reading Research Quarterly, 40*(2), 148–182. doi:10.1598/RRQ.40.2.2

Neufeld, P. (2005). Comprehension instruction in content area classes. *The Reading Teacher, 59*(4), 302–312. doi:10.1598/RT.59.4.1

Pressley, M. (1989). Strategies that improve children's memory and comprehension of text. *The Elementary School Journal, 90*, 3–12. doi:10.1086/461599

Richgels, D., McGee, L., Lomax, R., & Sheard, C. (1987). Awareness of four text structures: Effects of recall on expository text. *Reading Research Quarterly, 22*(1), 177–196. doi:10.2307/747664

Tatum, A.W. (2011). Diversity and literacy. In S.J. Samuels & A.E. Farstrup (Eds.), *What research has to say about reading instruction* (4th ed., pp. 424–447). Newark, DE: International Reading Association.

Terry, N.P., & Connor, C.M. (2012). Changing nonmainstream American English use and early reading achievement from kindergarten to first grade. *American Journal of Speech-Language Pathology, 21*(1/2), 78–86. doi:10.1044/1058-0360(2011/10-0093)

Tomlinson, C. (2001). *How to differentiate instruction in mixed ability classrooms* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Vacca, R.T., & Vacca, J.L. (1999). *Content area reading: Literacy and learning across the curriculum* (6th ed.). Menlo Park, CA: Longman.

Wharton-McDonald, R., Pressley, M., & Hampston, J.M. (1998). Literacy instruction in nine first-grade classrooms: Teacher characteristics and student achievement. *The Elementary School Journal, 99*(2), 101–128. doi:10.1086/461918

Williams, J.P., Hall, K.M., Lauer, K.D., Stafford, B., DeSisto, L.A., & deCani, J. (2005). Expository text comprehension in the primary grade classroom. *Journal of Educational Psychology, 97*(4), 538–550. doi:10.1037/0022-0663.97.4.538

Williams, J.P., Stafford, K.B., Lauer, K.D., Hall, K.M., & Pollini, S. (2009). Embedding reading comprehension training in content-area instruction. *Journal of Educational Psychology, 101*(1), 1–20. doi:10.1037/a0013152

LITERATURE CITED

Hoffman, M. (1991). *Amazing Grace*. New York: Dial.

Lobel, A. (1989). *Small pig*. New York: Trumpet Club.

Recorvits, H. (2003). *My name is Yoon*. New York: Frances Foster.

Rylant, C. (2004). *Puppy Mudge finds a friend*. New York: Simon & Schuster.

Simon, S. (1998). *Wild babies*. New York: HarperCollins.