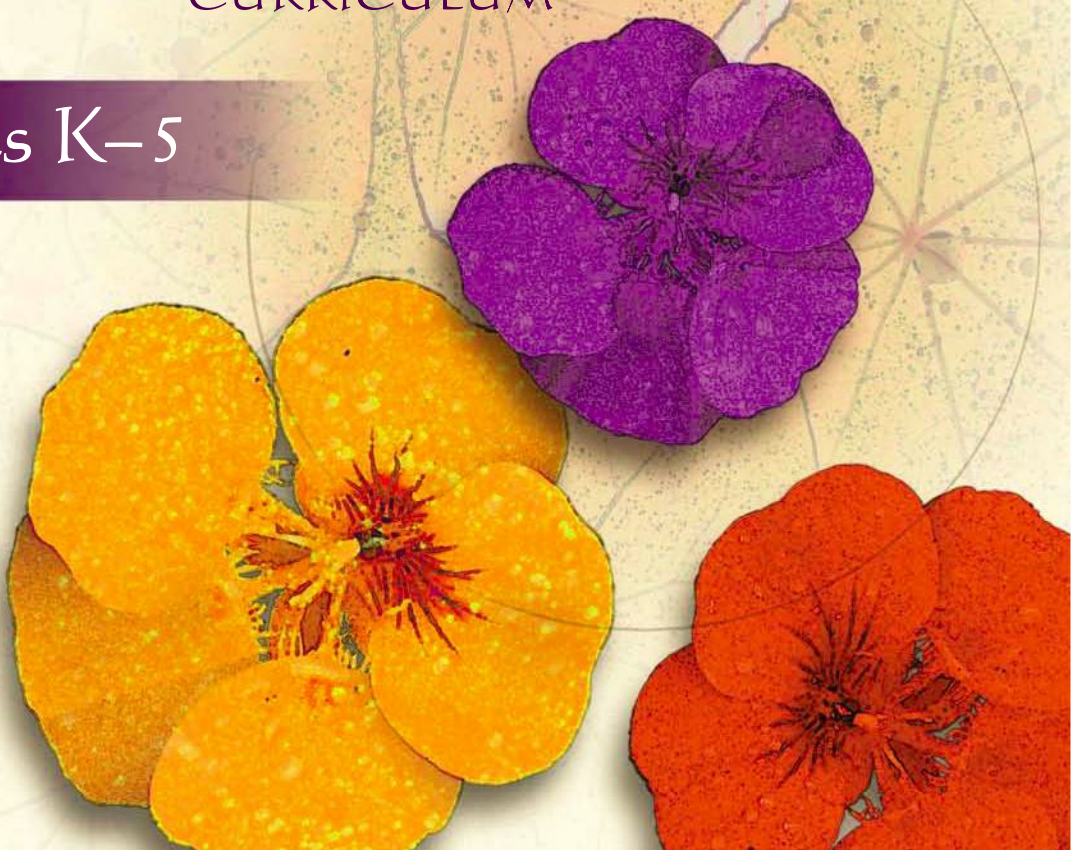
Carol Ann Tomlinson
Caroline Cunningham Eidson

Differentiation in Practice

A RESOURCE GUIDE FOR DIFFERENTIATING CURRICULUM

Grades K–5



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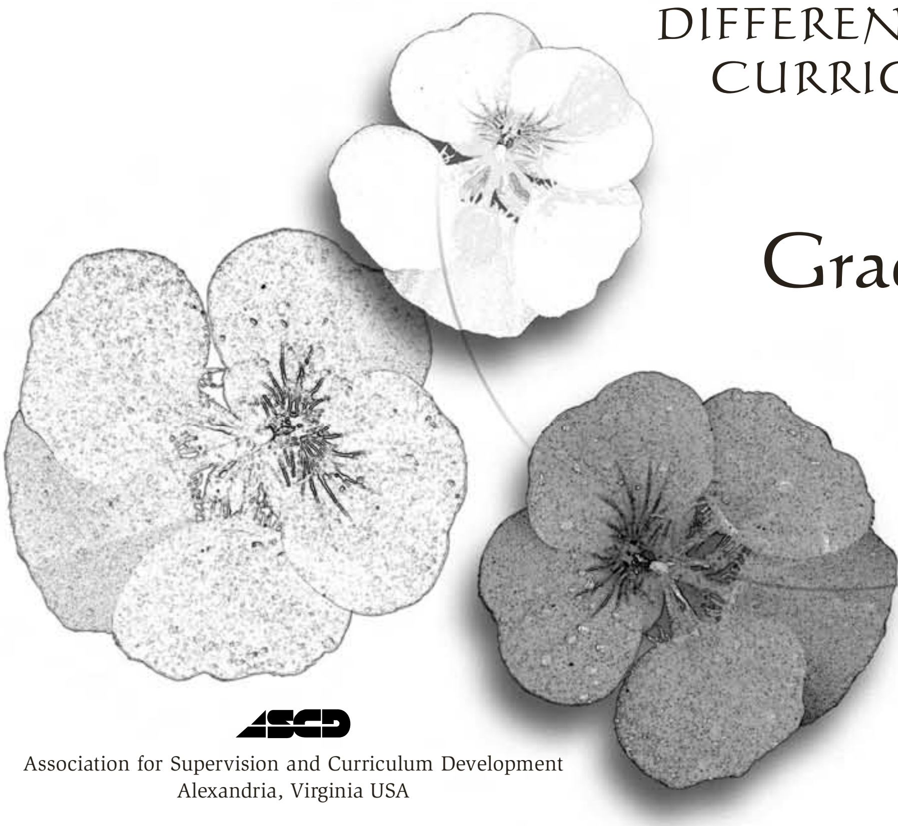

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For the students
who sometimes gently and sometimes
ferociously insisted we see them as individuals

For mentors
who made us believe it was not only possible
but necessary to do so

For colleagues
who share a passion for education as a shared enterprise
that enables students and teachers to grow together

And for family and friends
who renew our energy and greet us with joy—
whether or not we get it right.

Differentiation in Practice

A Resource Guide for Differentiating Curriculum, Grades K–5

Acknowledgments

No book of this sort is ever really written by just one or two people. There are many hands, minds, and professional practices reflected in its pages—and, therefore, many people to thank.

Our thanks foremost to the contributing authors of the units contained in this book: Jennifer Ann Bonnett, Elizabeth Hargrave, Laura Massey, and Sandra Williams Page. Each of them is the kind of educator who enhances not just the lives of students, but the lives of colleagues as well. They are able practitioners of differentiation and fine curriculum designers. In addition, they were willing to risk sharing their ideas—first with authors and editors, whom they knew would tinker with the material they submitted, and then with the teachers who would read the finished product and (quite rightly) examine each unit with a questioning eye. On behalf of all educators who learn from this book, our thanks to these talented teachers for making it happen.

We are indebted, too, to Cindy Strickland—a top-quality teacher, thinker, and editor—who edited, revised, and stretched our work. Her keen eye and solid thinking have made the book stronger in so many ways.

As always, the ASCD team of editors and designers were the best support system authors can hope for. The ASCD vision for and commitment to the concept of differentiation provides rich and fertile soil for this body of work. That ASCD staff members hold high standards for themselves encourages us always to do the same.

Both of this book's authors have become better educators in the partnership of colleagues. The teachers with whom we taught longest (particularly those in Fauquier County, Virginia, and at Peabody School in Charlottesville, Virginia) have been catalysts for our own professional growth. We're also nourished by educators from around the country who ask hard questions and generously share their work—both the successes and the setbacks.

Our friends and families support the time-intensive goal of writing, even at the expense of more carefree weekends, holidays, and vacations. It would be difficult to overstate the role of that sort of partnership in our mission.

Finally, both of us are teachers. The faces and lives of the young learners we once taught continue to steer us today. The collegiality of the

adults we now teach helps us keep theory and practice—the cornerstones of effective educational writing—in balance. Both groups remind us daily of the truth in Susan O'Hanian's observation about being an educator: First, no matter how much the educator does, it will never seem enough. Second, the educator's inability to do everything is not a license to do nothing. In that spirit, we thank all those who helped us take one more step in a progression of steps that has no end.

Introduction

This book is part of a series of ASCD publications on differentiating instruction. Each is designed to play a particular role in helping educators think about and develop classrooms that attend to learner needs as they guide learners through a curricular sequence.

How to Differentiate Instruction in Mixed-Ability Classrooms (Tomlinson, 2001) explains the basic framework of differentiation. Such a framework allows teachers to plan in consistent and coherent ways. *The Differentiated Classroom: Responding to the Needs of All Learners* (Tomlinson, 1999a) elaborates on the framework and describes classroom scenarios in which differentiation is taking place. A third book, *Leadership for Differentiating Schools and Classrooms* (Tomlinson & Allan, 2000), discusses how to link what we know about school change with the goals of differentiation and seeks to provide guidance for educational leaders who want to be a part of promoting and supporting responsive instruction. In addition to these books, an ASCD Professional Inquiry Kit called *Differentiating Instruction for Mixed-Ability Classrooms* (Tomlinson, 1996) guides educators, in an inductive manner, to explore and apply key principles of differentiation.

Four video programs, all produced by Leslie Kiernan and ASCD, give progressively expansive images of how differentiation actually looks in the classroom. *Differentiating Instruction* (1997) shows brief applications of differentiating content, process, and products according to student readiness, interest, and learning profile in primary, elementary, middle, and high school classrooms. It also illustrates a number of instructional strategies used for purposes of differentiating or modifying instruction. A three-video set, *At Work in the Differentiated Classroom* (2001), shows excerpts from a month-long unit in a middle school classroom as a means of exploring essential principles of differentiation, examines management in differentiated settings from primary grades through high school, and probes the role of the teacher in a differentiated classroom. *A Visit to a Differentiated Classroom* (2001) takes viewers through a single day in a multi-age, differentiated elementary classroom. Finally, *Instructional Strategies for the Differentiated Classroom* (2003) illustrates approaches to address varied learner needs and support responsive teaching. Each of these materials attempts to help educators think about the nature of classrooms that are defensibly differentiated and move toward development of such classrooms. Each of the publications plays a different role in the process of reflection, definition, and translation.

This book uses yet another lens to examine differentiation and support its implementation in classrooms. It joins a companion book (*Differentiation in Practice: A Resource Guide for Differentiating Curriculum, Grades 5–9*) in presenting a series of actual curricular units developed by teachers who work hard to differentiate instruction in their classrooms. Thus, these books move from defining and describing differentiation to providing the actual curriculum used to differentiate instruction.

Differentiation in the Elementary Years

Differentiating in elementary classrooms means that teachers proactively engage learners where they are, recognizing that an elementary classroom is a mixed bag of readiness levels, interests, and learning preferences. Anyone who has spent any time in a kindergarten classroom can attest that young children enter school at almost astoundingly different levels, with a wide variety of different interests and experiences, and with a broad range of learning preferences and styles. Just as in sports, where some students seem born to run, jump, and leap through games with ease while others struggle to walk a straight line, some students enter school ready to learn, having managed to already grasp the skills needed to do so. Other students take a while to warm up to the structure and requirements of school. And, while some differences among elementary students diminish as all are exposed to the same types of experiences and given the same types of learning opportunities over time, other differences arise and become increasingly evident as students progress from grade to grade.

In elementary schools, the danger of "losing" students along the way is ever-present, and the same people who can attest to the wide range of differences among elementary students can also attest to the fact that students seem to be "checking out" of school and academics at earlier and earlier ages. For this reason, it becomes increasingly critical that elementary teachers find ways to encourage students to remain engaged in the learning process; this is a challenge that is difficult if not impossible to meet if students' differences are ignored.

Another reason why differentiation is so critical in the elementary years is that young students' early experiences have a profound impact on their views of school, their conceptions of the learning process, and their perceptions of themselves as learners. By igniting students' love of learning early in their schooling and by helping them to respect not only their own but also others' strengths, weaknesses, and interests, elementary school teachers establish the groundwork upon which students build their future learning. This book provides a vision of what student-responsive classrooms can look like during the elementary years in the hope that educators will continue to strive to instill in all learners a joy for learning and a love of the possibilities that it brings.

What the Book Is (and Isn't) Intended to Be

As we prepared to write this book and its companion (*Grades 5–9*), we had numerous conversations between ourselves, with editors, and with many colleagues in education. Each conversation helped us chart our eventual course. Our primary goal was to provide models of differentiated units of study. We wanted to move beyond (necessarily) episodic descriptions of differentiation to show how it might flow through an entire unit. We also wanted to present units at a range of grade levels and in a variety of subjects. It seemed too much to provide units for grades K–12 in a single book, so we began by working with units that span "the middle years." The book you're reading now adds differentiated units for grades K–5.

Even after narrowing the range of grade levels, we realized there were so many subjects to consider that we had to refine our focus further. Ultimately, we elected to include differentiated units in math (two units), science, social studies, and language arts (two units). And while we have developed the book with a primary and elementary focus, our intent is that it be useful to a broader range of teachers than the grade levels and subjects it specifically represents. This is a book designed to teach anyone who wants to learn how to differentiate curriculum how to do so—or how to do so more effectively.

To that end, each of the units is intended to be more representative than restrictive. That is, an elementary art teacher should be able to look at the social studies unit in this book, see how it works, and use similar principles and formats to develop a differentiated art unit for her students. A 7th grade language arts teacher should be able to study several of the units here and synthesize principles and procedures he finds therein to guide development of a differentiated language arts unit for 7th graders. In sum, we intend this book to be a vehicle for professional development.

What this book is *not* intended to be is off-the-shelf curriculum for any classroom. It is not possible to create the "correct" unit, for example, on how to teach about plants. Teachers in one classroom will conceive that process differently than will teachers in other classrooms or teachers in a different part of the country, in a different type of school, or responsible for a different set of academic standards. In the end, then, we are presenting educators with a learning tool—not a teaching tool. If teachers (and other educators) can read this book and say, "There's something I can learn here," then we will have succeeded.

How the Book Is Designed

Because we want the book to be a learning tool for a maximum number of teachers, we have made key decisions about its presentation. First, we decided to begin the book with Part I's primer on differentiation—an essential piece for readers new to the topic and a helpful refresher for those already familiar with it. We also opted to include an extended glossary (page 184), which explains terms and strategies that might not be familiar to all readers. Collecting this information in the back of the book, we thought, was preferable to interrupting the units themselves with "sidebar" explanations.

Part II, the body of the book, is devoted to instructional units. We think it will be helpful to share some of our thinking about the layout and contents of the units, each of which is presented in four parts.

• **Unit Introduction.** The first component of every unit is the introduction, which includes a prose overview of the unit; a list of standards addressed in the unit; the key concepts and generalizations that help with teacher and student focus; a delineation of what students should know, understand, and be able to do as a result of the unit; and a list of the key instructional strategies used in the unit. Some of the units also make links across units and disciplines and promote connections with students' lives and experiences. Note that because of our desire to make the book a learning tool and not a set of lesson plans, we have listed the subject area for each unit, but not a grade level. Similarly, our references to the specific standards around which teachers constructed the units do not include grade-level designations.

• **Unit Overview Chart.** The second component is an overview chart, designed with three goals in mind: 1) to provide orientation in the form of a "big picture" snapshot of the unit's steps or events; 2) to provide an estimate of the amount of time each step or event requires; and 3) to clarify which portions of the unit apply to the class as a whole and which are differentiated.

• **Unit Description.** The third component is the unit description itself. It appears in the left-hand column of each unit page and gives a step-by-step explanation of what takes place in the classroom during the unit. Asterisks in the margins highlight differentiated components. All referenced supporting materials (samples such as worksheets, resource lists, learning contracts, graphic organizers, and assessments) appear at the end of the unit.

• **Teacher Commentary.** The fourth component is an explanation, in the voice of the teacher who created the unit, of what she was thinking as she planned and presented instruction. For our purposes, this is a particularly valuable element. To listen to the teacher who developed the unit is to move well beyond what happens in the classroom and to begin to analyze why teachers make decisions as they do. At one point in the writing and editing process, we thought we should reduce the teacher commentary sections to the fewest possible words; we quickly discovered that when we did so, we lost the magic the book has to offer. We hope you enjoy listening to the teachers as much as we have.

We tried to balance two needs in our editing of the units. First, we wanted to maintain the integrity of each teacher's unit. Second, we wanted to be sure to have both consistency (of terminology, of format, of essential philosophy) and variety (in instructional strategies, use of groups, assessment methods, etc.). The teachers who created the units have approved the changes we made or have helped us see how to make necessary modifications more appropriately.

Also, please note that we have opted to make the units somewhat more generic than specific. As teachers, we sometimes have the habit of looking for exact matches for our classroom needs and jettisoning whatever doesn't match. As authors, we can't eliminate the habit, but we wanted to make it a little harder to exercise. For example, although we have taken great care to list state standards reflected in each unit, we have intentionally not listed the name of the state from which the standards came. (It's amazing how similar standards on the same topic are across states.) We're hopeful of making the point that good differentiation is attentive to standards and other curricular requirements, but we want to help readers avoid the inclination to say, "Oh, these aren't *my* standards, so this wouldn't work in my classroom."

Finally, we decided to include solid units rather than "showcase" ones. What's here is more roast beef than Beef Wellington. We wanted to include units that demonstrate coherence, focused instruction, thoughtful engagement of students, and flexibility; we *did not* want to include units that dazzle the imagination. After all, although it may be fascinating to watch someone tap dance on the ceiling, few of us are inclined to try it ourselves. Hopefully, the units in this book are familiar enough to be approachable, but venture far enough into the unfamiliar to provide challenge for future growth. In fact, in this regard, our aim for readers is similar to what we recommend for students: pushing them a little beyond their comfort zones. If all readers feel totally at ease with the units, we've lowered the bar. If we send all readers running, we've set the bar too high. (In the latter instance, some judicious rereading over a period of professional growth just might be worthwhile.)

It may well be that the greatest pleasure of teaching comes from learning. It is our hope that the book as a whole will serve as one catalyst for helping teachers become the very best professionals they can be.

PART I

A Brief Primer on Differentiation

What Is Differentiated Instruction?

Differentiated instruction is really just common sense. Most parents learn pretty quickly that they must differentiate their parenting for children who simply are not identical in the ways they approach life. Perhaps one child in a family is a daredevil, charging at the world and taking physical risks from the earliest opportunities. She needs some parental restraints to help protect her from danger, but she also needs additional opportunities to develop the physical prowess that seems so important to her. A second child is more timid physically and needs encouragement to jump into the pool, ride a bike, or try out for a team. For this child, parents might push a little more in areas where, with their other child (*too* independent and physically confident?), they would hold back. One of the children may need a great deal of sleep, while the other can get by easily with very little. One may like virtually all foods, while the other is a picky eater. From infancy on, one may be content to sit quietly and turn the pages of a book, while the other shows neither the patience nor the inclination for reading in the early years.

These are just a few of scores of differences children in the same family might exhibit. While effective parents work from a coherent (although not totally static) set of beliefs and principles about parenting, they also learn that their application of these principles will inevitably change as different children demonstrate different needs—and, in fact, as the parents themselves garner more experience in their roles.

In the classroom, the challenges are even greater. One child enters kindergarten reading like a 4th grader. Another comes with no understanding of letters or letter sounds. One child pays attention faithfully when the teacher gives directions. Another child has great difficulty attending to the teacher under almost all circumstances. One child has surprisingly well developed fine-motor skills. Another child struggles with basic gross-motor movements.

Effective teachers, like effective parents, work from a coherent but ever-evolving set of beliefs and principles about teaching and learning. These teachers also understand that how they apply these fundamental principles will vary as they focus on children with different needs and as they themselves become more experienced classroom leaders.

Differentiated teaching is responsive teaching. It stems from a teacher's solid (and growing) understanding of how teaching and learning occur, and it responds to varied learners' needs for more structure or more independence, more practice or greater challenge, a more active or less active approach to learning, and so on. Teachers who differentiate instruction are quite aware of the scope and sequence of curriculum prescribed by their state, district, and school. They are also aware that the students in their classrooms begin each school year spread out along a continuum of understanding and skill. These teachers' goal is to maximize the capacity of each learner by teaching in ways that help all learners bridge gaps in understanding and skill and help each learner grow as much and as quickly as he or she can.

Meet Some 3rd Graders

Thinking about the composition of a classroom clarifies both the need for differentiation and the challenge this kind of responsive teaching presents for a teacher. Let's make the the acquaintance of some 3rd graders, who are about to become a part of Ms. Johnson's group of 26 young learners, ranging in age from 7 to 9.

Iliana speaks little English, but she's learning quickly. Her parents are multilingual and speak English at home as often as possible to help her learn the new language. Iliana likes math computation because the words don't trip her up so badly. Word problems, however, are still a chore.

Tia doesn't speak a lot of English, either. Neither do her parents, who immigrated to a new country looking for better employment. Tia is very quiet in class and speaks only when pushed to do so.

Michael, who is black, is beginning to wonder why he rarely sees people who look like him in the books he reads in class. He also wonders why he's the only black boy in his class who seems to really enjoy math. He likes math best when the teacher asks students to figure out how to solve problems using what they've learned. He works best with classmates rather than alone.

Andrea is very creative and loves talking about ideas. She has a significant learning disability, however, and has a very difficult time with the sequencing required both in math and in reading. She finds reading especially tedious because the books seem silly and simple to her. She thrives on problems that can be solved in a variety of ways.

Sherita is very bright, reading at an 8th grade level. She has broad general knowledge and also thinks in very abstract ways. She rarely learns new things at school, and the days spent waiting to encounter something different and interesting seem very long. She daydreams about horses a lot and likes books on astronomy, when she can find them.

Landry is good with numbers and excellent at art. He has never liked reading, and he has difficulty concentrating when the teacher asks him to work with classmates. His concentration is much better when he works alone.

Max is a cheerful, hard worker, but often doesn't have enough time to finish tasks and to figure out just exactly how things work. He really loves tools and all sorts of machines. He is aware that his classmates find school easier than he does, and he's getting further behind in most of his subjects.

Micah seems frightened of lots of things. He hangs back in class, stays by himself a great deal, seldom speaks up during discussions, and appears quite uncomfortable when his teachers call on him. He is absent a lot, and his work is spotty in quality. It's hard to get a handle on what he understands and can do.

Will has both physical and cognitive handicaps. His curriculum is shaped largely by an individualized education plan (IEP), but he enjoys the company and partnership of the other students in his class, and he's happiest when the teacher arranges things so he is part of student work groups.

Yana has incredible ideas—and an incredibly hard time writing them in an order that makes sense to others. She seems to see things in images rather than words and is often reduced to tears when she is asked to write.

Betsy loves to get answers right in class and to finish her work first. She's happiest when she knows exactly what she must do to be correct. She prefers to work alone and gets testy when right answers and formulas for success elude her. She is competitive and pulls away from situations that suggest she may not be best.

These students are a varied lot, but they are nonetheless typical of the academic diversity in most classrooms—and no more or less diverse in their learning needs than the rest of the 26 students in Ms. Johnson's 3rd grade classroom.

Ms. Johnson has a choice to make about the year ahead. She can try to work around the differences her students bring to school each day and move ahead with a tightly prescribed curriculum and timeline, or she can work consistently to understand the variance in her learners and plan to address those needs as flexibly and effectively as possible. The first approach certainly appears to be the easier way. What, then, would be Ms. Johnson's rationale for selecting the second approach to teaching?

What Is the Thinking Behind Differentiated Instruction?

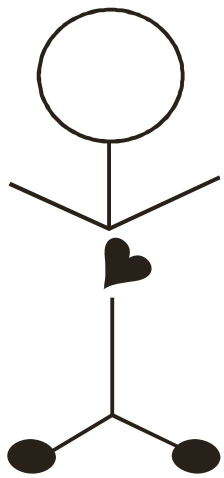
Ms. Johnson believes she must balance two factors in her classroom: the needs of her students and the requirements of a curriculum. In her opinion, she is a more effective teacher when she plans and teaches with both factors in the forefront of her thinking. In fact, she is guided by her sensitivity to the connections among four classroom elements: *who* she teaches, *where* she teaches, *what* she teaches, and *how* she teaches (see Figure 1). To Ms. Johnson, the four elements form a tightly interwoven system in which each part profoundly affects and is profoundly affected by the others. If any one of the elements is diminished, learning is diminished as well.

Who She Teaches

With each passing year, Ms. Johnson becomes more aware that there are a variety of factors shaping her students as learners. The students' faces are a reminder that they represent two genders and several cultures. She has come to understand that boys tend to have different learning profiles than girls do, but she also knows there are exceptions to gender-based patterns of learning. She has come to understand that students' cultural backgrounds can profoundly shape both their views of school and the ways they experience school. She realizes that school may be a more comfortable fit for students from the majority culture (whose background is in sync with the ways that schools and classrooms are conducted) than it is for some minority students (whose cultural experiences and expectations differ from the norms of the classroom). Again, however, she has learned that there are

FIGURE 1

RESPONSIVE TEACHING . . .



Who We Teach

What We Teach

Where We Teach

How We Teach

TAKES ALL THE PARTS

variations among the learning patterns of students from each cultural group. Further, gender and culture can combine to affect the "fit" of school for a particular child.

Ms. Johnson also sees a great variety of interests reflected in the faces of her students. They become more animated and involved when the curriculum intersects with their individual and group interests, and she has seen how some of them become excited and engaged by one instructional approach or topic, just as others seem to disengage and float away from her. She knows, too, that her students are shaped as learners by how their brains are structured to support success in a given subject or field. The students' areas of talent and degrees of talent in each area seem as varied as their faces.

Further, due to experiences outside of school, her students do not necessarily encounter school as an even playing field. Some come to school with rich and varied life experiences. Others bring a very limited repertoire of background experiences. This reality, too, causes her students to differ in important ways.

All of these factors—gender, culture, personal interests, ability, experience, and intelligence preference—shape each student to be both like and unlike every other student in the class. Ms. Johnson works to understand and honor both the individuality and commonality represented in her class. Micah, Tia, Betsy, Landry, Max, and all the other young learners enter her classroom daily, dreams in tow, wanting to be optimistic about the learning journey ahead. Ms. Johnson knows that the dreams are not identical and that the learning journeys will both converge and diverge throughout the year.

What She Teaches

Curriculum gives students "legs": the knowledge, understanding, and skills they'll use to move powerfully through life. Ms. Johnson's district provides well-articulated curricula, which represent both the district's best judgment about what 3rd graders should learn and the reality of high-stakes testing. All students are required to take the same standardized test in May. Sherita, of course, could take the test in September and still exceed grade-level expectations. Betsy could, too. Michael and Iliana could exceed expectations in math, although perhaps not in some of the other test sections. But Tia can't yet spell or read at a 1st grade level. Neither can Will. Yana would leap ahead of everyone in writing if only she had some help arranging her ideas. Likewise, Andrea would excel with some assistance, even though her writing struggles and Yana's have different origins. It's also true that key student interests are absent from the mandated assessment. Art (Landry's passion) is not on the test, nor is the astronomy that fascinates Sherita, nor is much of the African American or Hispanic American history that resonates with many of Ms. Johnson's students and their families.

Certainly the district curriculum will be Ms. Johnson's blueprint as she plans units and lessons, but it doesn't seem to be the only tool she needs. She will need to backtrack with some of her students in reading, some in writing, some in math, and some in science. Some of the students are missing critical understandings and skills in all those subjects, but many will need additional instruction in only one. For these students, she has to plan to work both backward (to pick up key pieces) and forward (to challenge and engage). To do less would reinforce existing gaps in their learning and magnify their sense of frustration and futility.

At the same time, some of Ms. Johnson's students have essentially completed the 3rd grade curriculum before the year has even begun. It does not seem adequate to allow these students to stop where the prescribed curriculum stops. So in the common units of study she develops, based on the concepts and understandings reflected in the 3rd grade standards, she will find regular opportunities for some of her students to fill in gaps in knowledge and skill that precede the required curriculum *and* regular opportunities for other students to move beyond the 3rd grade expectations.

Ms. Johnson will also systematically find space in her curriculum to extend the varied interests her students bring to class and to expand their interests as well. She can't really get to know her students' points of entry into learning and then disregard them. In other words, the more fully she understands *who* she teaches, the more aware she is that she must adapt *what* she teaches to serve individual learners well.

Where She Teaches

Ms. Johnson understands that the learning environment she creates in her classroom may be the single most important make-or-break element in helping her students become the best they can be. This is a matter of the heart. In a hundred subtle ways, the learning environment sends each student continual messages about how the class will be. How does the teacher communicate genuine belonging to Tia, who speaks virtually no English, or to Michael, who even at a young age is grappling with issues of race? How does she ensure that Max feels affirmed instead of like he's always running a losing race? How does she help her 3rd graders have real respect for Will, who wants to be one of the group despite the physical and cognitive differences that often seem to isolate him from his peers? How does she convey to Sherita that there is always something new to be learned? How does she help Betsy feel safe enough to risk failure and Micah safe enough to stop hiding?

Tia cannot feel welcome and affirmed in a place where her background seems peripheral to the class agenda or where her current communication limitations make her feel inconvenient. Michael can't feel like school belongs to him if he does not see himself, his parents, and his neighbors reflected in the curriculum. Max and Will can't thrive in a place that continually consigns them to last place in a race to reach benchmarks. Sherita can't feel that she matters if no one cares to provide activities or materials that fit and challenge her. Andrea and Yana cannot find affirmation and use for their rich ideas if they're unable to negotiate the barriers that keep them from writing those ideas down and sharing them with the world.

It is not likely that these students will each find the classroom inviting if there is only one set of benchmarks for success, an inflexible curriculum, or a single timeline for growth. The learning environment in Ms. Johnson's classroom is linked solidly to the varied needs of her students, the ways in which she can work with a curriculum that is both prescribed and pliable, and the ways in which she can enlist each of her learners in developing a place that attends to the needs of individuals as well as the needs of the group.

How She Teaches

Because Ms. Johnson sees and values the individuals in her class, she knows she will need to teach each in accordance with his or her readiness levels, interests, and best modes of learning. Therefore, Ms. Johnson's central goal is a flexible sort of instruction. She will teach the whole class when that makes sense—and small groups when that makes better sense. She will support students in attaching their own interests to curricular goals. She will provide multiple ways of learning what needs to be learned. She will help students come to understand which approaches work best for them under particular circumstances.

It is this "how we teach" element that we call *differentiated instruction.* This element, however, is intricately bound with a teacher's informed and growing awareness of student profile, clarity about the kind of learning environment that invites engaged learning, and analysis of curricular sequences. Ms. Johnson has accepted two truths about her teaching. First, she will never be able to do everything each child needs on a given day or in a given year. Second, the more diligently she works to know her students and match her instruction to their needs, the more likely it is that the year will be successful for the broad range of learners and the more satisfied she will feel as a professional.

What Are the Hallmarks of a Differentiated Classroom?

Ms. Johnson's differentiated classroom will often appear different from classrooms where the teacher practices one-size-fits-all instruction. The characteristics of her classroom stem from her goals of achieving best-fit and maximum growth for each learner. Here are some of the distinguishing characteristics of effectively differentiated classrooms:

There is a strong link between assessment and instruction. The teacher in a differentiated classroom pre-assesses to find out where students are relative to upcoming knowledge, skill, and understanding. The teacher develops units and lesson plans based on what she learns through pre-assessment and on her accumulating knowledge of her learners. Throughout each unit, the teacher continually assesses student knowledge, understanding, and skill in both formal and informal ways, making ongoing adjustments to instructional plans to ensure progression toward individual and group goals. The teacher also assesses learner interests and learning profiles in order to enhance individual motivation and learning efficiency. Finally, the teacher often provides more than one way for students to show what they know, understand, and can do. The goal of multiple assessment formats is to ensure that students have a way to show what they have accomplished during a sequence of study.

The teacher is clear about learning goals. In effectively differentiated classrooms, the teacher specifies what students should know, understand, and be able to do for each unit of study. This clarity allows the teacher to focus on essential learning goals with all students, but at varying degrees of complexity, with varied support systems, and so on. The teacher also maps sequences of skills and understanding that precede and extend beyond the grade-level curriculum. This enables the teacher to help students make up learning deficits and continue their learning beyond prescribed levels in an organized fashion that can be linked directly to both grade-level goals and individual needs.

The teacher groups students flexibly. At times, the class works as a whole. At times, students work alone. At times, the teacher groups students homogeneously for readiness, based on similar learning needs. At other times, she groups students in mixed-readiness groups, ensuring that tasks call on each student to make a key academic contribution to the success of the group. Likewise, she forms both similar-interest and mixed-interest groups, depending on the nature of the task at hand. She also forms groups in which students have similar learning profiles and groups in which student learning profiles differ. In addition, she sometimes groups students randomly and often guides students in forming their own work groups or making the decision to work alone on a given task. As often as she can, the teacher meets with students one on one to monitor progress, coach them in next steps, and help them set new goals. The goal of flexible grouping is to balance the need to teach students where they are and to provide them with opportunities to interact in meaningful and productive ways with a wide range of peers.

The teacher uses time, space, and materials flexibly. A teacher in an effectively differentiated classroom continues to look for ways to arrange the classroom to enable students to work in a variety of ways, to enable students to use time flexibly, to match materials to learner needs, and to meet with students in varied formats.

The teacher involves her students in understanding the nature of the classroom and in making it work for everyone. When a teacher guides her students in sharing responsibility for a classroom in which the goal is to help everyone receive the support he or she needs to grow academically, the students become a central factor in that classroom's operation. Whether the students are establishing class rules, making suggestions for smooth movement from place to place in the classroom, helping a peer, distributing materials, keeping records of their own goals and progress, or any one of a score of other roles, they contribute significantly both to classroom efficiency and to a sense of community.

The teacher emphasizes individual growth as central to the success of the classroom. In many classrooms, norm-based assessment and grading are the unquestioned rule. In a differentiated classroom, the teacher works consistently with students and parents to help them understand the importance of competing with oneself to achieve one's "personal best." Each student is responsible for working to progress as much as he or she can toward goals that are personally challenging. The teacher is responsible for guiding and supporting that progress. When that progress happens, it is a sign of success. When it does not, it is an indicator that an adjustment must be made— on the part of the teacher, the student, or both.

Parents still want and need indication of a student's standing relative to benchmarks, standards, or grade-level peers. In a differentiated classroom, though, the teacher finds a way to help both students and parents chart personal growth in relation to designated benchmarks. Under any other system, Tia, Andrea, Max, and Will would have virtually no chance for "success" and a high chance of diminishing effort in the face of discouragement. Under any other system, Sherita and Betsy would be rewarded for what they already know without the need to embrace challenge.

The teacher works to ensure that all students have "respectful" work. While students will display different interests, readiness levels, and learning profiles, every student should consistently have work that respects him or her as an individual. In a differentiated classroom, this means each student is asked to focus on the essential knowledge, understanding, and skill that is core to each unit and lesson. Each student is required to think at a high level to complete his or her work. Each student is assigned work that looks as inviting and important as the work of his or her classmates. Drill, practice, and rote repetition do not mark struggling students. Advanced learners are not indicated by tangential tasks.

The teacher makes sure differentiation is always "a way up," never "a way out." It is easy to underestimate the learning potential of any learner. The goal of differentiated tasks is to cause each learner to stretch to complete a task that is difficult but nonetheless achievable, thanks to a support system that helps the learner navigate the unknown portions of the work. A teacher effective with differentiation will always "teach up" to a child rather than teaching down.

The teacher sets her own sights high, just as she asks her students to set their sights high. A teacher effective with differentiation is reflective about her students and her own practice. She is aware of and grateful for lessons that work well for most of her students. She understands and accepts that no teacher can be perfect. She does not accept that she is "doing the best she can." Her goal is not preservation of her current level of practice, but continued extension of that practice through the very last day she remains a teacher. She has a learning orientation and is excited by her own growth, just as she is excited by the growth of her students. She expects from herself no less than she expects of her students—maximum effort to achieve maximum potential.

The teacher seeks specialists' active partnership in her classroom. The effective teacher in a differentiated classroom is much like a good general practitioner in medicine. It is the GP's job to see to the welfare of her patients. She does that with careful attention to each patient's symptoms and needs. Some of the time, the GP can diagnose and treat a patient without assistance; some of the time, she needs to call in a specialist. A teacher effective with differentiation is ready to call on the expertise of specialists whenever a student's needs indicate that would be helpful. Specialists in second language instruction, multicultural education, reading, special education, gifted education, counseling, media, and a range of other areas have focused their careers on developing knowledge and skills often unfamiliar to the general classroom teacher. An effective partnership between a specialist and a classroom teacher does more than benefit individual students; it is also a great vehicle for the classroom teacher and specialists' own professional development, thus bringing exponential benefits to students for years to come.

The teacher's differentiation is largely proactive rather than reactive. The teacher systematically plans for student differences. She does not make a single plan for all learners and hope to "adjust on the spot" if she realizes the plan is not working well for one or a few learners. Good teachers always improvise, of course. But effective differentiation rests upon purposeful planning for student variance, with improvisation as needed.

As this list implies, there is no single "right way" to differentiate instruction. The processes and practices that support responsive teaching vary with teacher expertise, the group of students in question, the time of year, the subject area, age of students, and so on. Effectively differentiated classes are guided by common principles but are crafted in many different ways.

How Does a Teacher Plan for Differentiated Instruction?

By now, it's clear that planning for differentiated instruction must involve careful consideration of student characteristics, curricular elements, and instructional strategies. A teacher at work in a differentiated classroom coordinates these three components with an eye toward increasing student understanding and engagement with the material to be studied. Let's take a closer look at each component.

Student Characteristics

There are three student characteristics that may indicate a need for modifications in curriculum and instruction. These characteristics are *readiness, interest,* and *learning profile.*

Readiness has to do with a student's current preparedness to work with a prescribed set of knowledge, understanding, and skill. If the student can complete a task effortlessly, he or she may make a good grade, but will not learn. If the work is well out of reach of the student's current proficiency, the student has no way to accomplish the task—and frustration, not learning, is the result.

Our best understanding of learning tells us that each of us learns best when a task is a little too difficult for our current level of knowledge, understanding, and skill *and* there is a support system present to help us bridge the gap. In Ms. Johnson's class, for example, Will and Betsy are at very different readiness levels for most tasks within the prescribed curriculum. If Ms. Johnson overlooks differences in student readiness, it's likely that Will will be perpetually confused and will not grow academically in systematic ways. Betsy will receive high marks, but she will not have had to stretch or grow to be an *A* student. Neither will be well served by repeated instruction that overlooks their readiness levels.

Interest is a major motivating factor for learning. A noted artist recently remarked that he never liked reading in school until one teacher asked him to interpret what he read through painting. At that point, he explained, he realized that authors and artists were challenged by the same themes and ideas. He became a better artist for the experience and a more willing reader, too. A wise teacher links required content to student interests in order to hook the learner. Because of the interconnectedness of all knowledge, there are many ways to link what a learner finds intriguing and what he or she is supposed to learn. In addition, effective teachers find "cracks in the schedule" that allow students to pursue their passions beyond the prescribed curriculum. Independent investigations can be effective for this purpose. Finally, the best teachers also help students develop new interests and passions—breathing life and joy into otherwise "flat" curriculum.

Learning profile refers to a student's preferred mode of learning—the way a learner learns best. A student's gender, culture, learning style, intelligence preference, or a combination of those factors may shape learning profile. As we've discussed, some students learn best when they collaborate with peers; some learn best alone. Some students must see the big picture of the thinking behind what they are learning before the parts make any sense; other students work effectively by gathering bits of learning and then constructing meaning. Some students are at their most efficient when they do analytical or "schoolhouse" sorts of tasks; others learn far better when they work on contextual or practical applications of ideas. Some students thrive on individual accolades; others are offended by emphasis on the individual and respond much better to group commendations.

We know many learning profile factors that can impede or aid a student's progress. In a differentiated classroom, a teacher attempts to provide ways of learning that make the learning journey of each student more efficient and effective.

Curricular Elements

There are at least three curricular elements teachers can adapt in response to learner readiness, interest, and learning profile. They are *content, process,* and *products*.

Content refers either to what a student should come to know, understand, and be able to do as the result of a segment of study, or to how the student will gain access to that knowledge, understanding, and skill. As often as possible, teachers hold steady *what* the student will learn and modify how students gain access to the content. For example, all students can work with the concept of community helpers, but the teacher may vary the reading level of materials students study on the topic and may use interviews with community helpers and videos of community helpers as well as readings about community helpers. Occasionally, though, the teacher has to vary *what* the students are learning. For example, perhaps the curriculum calls for students to learn how to tell time. Two students in the class have no concept of numbers. Three students already tell time with accuracy and independence. In this instance, when readiness levels vary so greatly with regard to a basic skill, it makes no sense for the teacher to teach the same content to all the students at the same time.

Process is a synonym for activities. A good activity calls on students to make sense of the knowledge, understanding, and skill specified by the curriculum. Learning has to happen *in* students, not *to* them. Effective activities are focused squarely on the key knowledge, understanding, and skills central to a segment of study and call on students to grapple with the content so they come to "own" it—so they make sense of it for themselves.

Products provide evidence of what a student has come to know, understand, and be able to do over an extended period of learning (generally weeks or months). They call on students to bring together knowledge, understanding, and skill; apply it; and extend it as a demonstration of their power with the content. Products guide students in moving from *consumers of knowledge* to *producers with knowledge*.

Teachers continually assess student readiness, interest, and learning profile, using what they learn to modify content, process, and products to be challenging and satisfying for their learners. A teacher can modify content, processes, and products together or separately in response to readiness, interest, and learning profile.

Instructional Strategies

There are many instructional strategies that are helpful in differentiating instruction. These are strategies that guide the teacher in looking at students in small groups or individually rather than only as a whole class, and they include learning centers, interest centers, learning contracts, mini-workshops, independent investigations, graphic organizers, and collaborative groups.

Figure 2 illustrates Ms. Johnson's planning for differentiation at varied points in the school year as she thinks about her students and uses the student characteristics of readiness, interest, and learning profile; the curricular elements of content, process, and products; and selected instructional strategies to help her match curriculum and instruction to learner need.

Baseball Camp: A Metaphor for Differentiation

John McCarthy, better known as Coach Mac, is director of Home Run Baseball Camp.* Each summer, his work with children mirrors the qualities of an effectively differentiated classroom.

The kids who come to baseball camp at any given time represent as much as an eight-year age span. Their sizes vary. They are male and female. Their past experience with baseball varies. Their talents vary in kind and degree. They represent diverse cultures and economic levels. But they *all* come to camp hoping to get better at their game.

Coach Mac watches the young players carefully, assessing their particular strengths and needs. Sometimes the kids all work on the same drill. Often they work on facets of the game they need to in order to develop most fully as players. They practice individually, in small groups, and as a team. The team gets better as each individual improves.

The coach also sees baseball as an ideal vehicle for teaching the kids about life, and into the drills, practices, and games, he weaves important lessons. He tells them that keeping the equipment ready is the players' job—not his job, not their parents'. Reading is as big a deal as hitting a home run. You can't expect to win if you don't eat well. Shining your shoes carefully says something about your devotion to the game. Coach Mac reckons that in his camp, kids get 50 percent baseball instruction and 50 percent life instruction. He muses that it would be difficult to tell where one ends and the other begins. Coach Mac says neither he nor the kids can control the degree of talent they bring to camp, but each can control the amount of effort they give to developing their talent. "Talent is what you bring," he says. "Effort is what you give." Effort is the great equalizer.

The kids love to compete, love to play the game. "Everyone loves winning," the coach says,

*Coach Mac was featured on *The Today Show* (NBC) on August 12, 2001.

FIGURE 2

USING STUDENT TRAITS AND CURRICULAR ELEMENTS TO PLAN DIFFERENTIATION

Student Traits	Teacher Response	Example of . . .
Sherita, Betsy, and several peers are very advanced readers.	For these students, Ms. Johnson includes books with advanced reading levels in most assignments in language arts, science, and social studies.	Differentiation of content based on similar student readiness.
Max loves tools and machines. He has difficulty with vocabulary, spelling, and reading.	Ms. Johnson helps Max develop a growing word bank of tools, machines, and machine parts. They use this as a way of increasing his vocabulary, enhancing his spelling, and prompting his writing.	Differentiation of content and process based on interest and readiness.
Students indicate different interests in the Westward Expansion unit.	Ms. Johnson forms reading clubs based on student interests. She provides access to a variety of books at a range of reading levels for each interest area. Students choose to read books alone or with a reading buddy. Then the interest groups meet to share passages and discuss questions that Ms. Johnson provides and that they generate themselves.	Differentiation of content based on readiness (readability of books), interest (student choice of topics), and learning profile (whether student's preference is to read alone or with a partner). Also focuses on mixed-readiness grouping with supports for successful discussions.
Micah, Tia, Max, Iliana, Will, Andrea, and several other students have difficulty with reading or are auditory learners.	Ms. Johnson (or a volunteer) regularly audiotapes key passages from language arts, science, and social studies so students can listen to the information.	Differentiation of content in response to student readiness and/or learning profile.
Yana is outgoing and has great ideas, but also has serious difficulty with writing. Micah is reticent and struggles to come up with ideas, but is fairly competent as a writer.	For today's writing assignment, Ms. Johnson pairs Yana and Micah. She thinks their strengths and needs might be complementary. She'll watch closely to see how the pairing works.	Differentiation of process based on readiness and learning profile. Emphasis on mixed needs and strengths.

Student Traits	Teacher Response	Example of . . .
Andrea is a good contextual problem solver. Landry is a visual learner. Betsy is a convergent learner who excels in "getting it right."	For today's science activity, Ms. Johnson asks these students to develop a suitable environment for an animal with specific traits. The task calls for research, drawing, and problem solving.	Differentiation of process based on learning profile, with a mixed learning profile group requiring the strengths of all members.
Will, Tia, and Max often need extra support to understand and use key concepts and skills. Two other students have been absent for almost a week.	Ms. Johnson places these students in the same work group for the "suitable animal environment" science activity. She has ensured that the animal traits are straightforward and illustrate key concepts and principles, and she checks in with the group several times throughout the class period to guide and monitor their work.	Differentiation of process based on similar readiness.
Students in the class vary widely in reading and writing readiness.	All students are developing picture books that depict a family during the time of the Westward Expansion. Ms. Johnson gives everyone the option of working alone or with one partner. She has developed project rubrics that reflect goals for all students and goals for individual students.	Differentiation of product based on learning profile (working arrangements) and readiness (rubrics with group and individual goals).
Max, Landry, and several other students have been particularly interested in how the Westward Expansion affected Native American families.	Ms. Johnson encourages these students to focus the picture books they are creating on the experiences of Native American families. She helps the students find books and Internet resources to get accurate information for their books.	Differentiation of product based on student interest and readiness.
Students have varied needs for research, generating ideas, writing, art, proofreading, and editing.	Throughout the picture book development, Ms. Johnson holds mini-workshops on each of the stages students need to progress through in order to succeed in their work. Sometimes she offers the mini-workshops as she observes needs. Sometimes students request them.	Differentiation of product and process based on readiness.

“but winning is a short-term thrill. Long-term satisfaction comes from *success,* not winning.” What constitutes success? Giving it all you’ve got. Getting better. Growing. That’s durable.

What do the kids say about the coach? The short players and the tall ones, the pitchers and the outfielders, the experienced and the novice, the talented and the not-so-talented, the white and the brown think he’s the best, of course. Why? He really cares about each of the players. He teaches them so much about baseball. When they miss a hit, he doesn’t get angry or frustrated, he just helps them learn better. He is their encourager.

There is much in Coach Mac’s baseball camp that mirrors the philosophy and practice of an effectively differentiated classroom. He sees and studies the differences in the faces and bodies that stand before him each day. He continually crafts an environment that asks of each person the best he or she can give. What he teaches—the art of the game of baseball—is for everyone. How he teaches, however, varies with individual needs and the needs of the team as a whole.

Neither baseball camp nor school is separate from life. Both are mechanisms for helping young people learn about life as they interact with each other, their coaches and teachers, and the game and content of their curriculum. A primary goal of life, baseball camp, and school is to do the best you can with what you bring. It’s the job of the coach—and the teacher—to support that effort.

* * *

We hope this primer on differentiation provides you with tools for reflecting on the units of differentiated instruction in Part II of this book—and on practices within your own classroom. Before reading on, pause to consider the following questions:

- In what ways do the explanations of differentiation we provide in this primer mesh with your understanding and practice? In what ways do they differ from your view of responsive teaching? How will you deal with the differences?
- Using the students introduced as examples, augment Figure 2 with other ways you might modify content, process, and products based on student readiness, interest, and learning profile if these students were in your class.
- Think about the baseball camp metaphor for a differentiated classroom. What does the metaphor suggest that’s best about your classroom? What elements in your classroom does it cause you to want to rethink? In what ways can you extend the metaphor by adding your own insights to it?

Additional clarification on terms and strategies discussed in this brief primer and used in the units that follow is available in the Glossary, beginning on page 184. To learn more about any of these topics, please consult the Resources on Differentiation and Related Topics, beginning on page 191.

PART II

Differentiated Units of Study

Readers read as they wish, of course, and there's great merit in that. We take away from a source what we are ready to take away, and we gather what we can find in accordance with how we learn best. We would not deny our readers this freedom even if we could. Nonetheless, we offer a few suggestions and questions to guide your learning from the units that follow:

- See if you can find colleagues to read, analyze, and discuss the units with you.
- Read all of the units—or at least several of them—not just ones that seem to address the grade level(s) you teach. Look for similarities and differences. Record what you see. What seem to be the non-negotiables in these units?
- Think about how the unit developers have included and yet moved beyond mandated standards. What's the difference between "covering the standards" and the ways these teachers are *using* standards?
- After you read and study a unit, go back to the list of standards reflected in the unit and the teacher's listing of what students should know, understand, and be able to do as a result of the unit. Check off those standards and goals you feel the unit addresses effectively. Develop ways to intensify the focus on any goals or standards you feel have not been addressed adequately.
- Look for the links between the learning goals (the standards as well as what students should know, understand, and be able to do) and the individual lessons in each unit. In what ways have these teachers used the learning goals to design the specific steps in the units?
- What benefits for students are likely to occur when a teacher organizes a unit by concepts rather than teaching a list of goals without one or more organizing concepts?
- Think about students you teach. Name them in your head or on paper. Jot down ways in which these specific students might benefit from the differentiated units versus nondifferentiated versions of the same units. Think about students with a range of learning needs, including students who could be described as "typical."
- For which students in your class or classes would you need to make additional adaptations in

order to facilitate optimal learning? How might you make these adaptations if you were to revise one of the units? Would it be easier to make the additional modifications in these differentiated units or in nondifferentiated ones?

• How effective do you feel the various units are at

— Beginning with sound curriculum prior to differentiating?
— Making assessment a pervasive and useful element in instruction?
— Providing respectful tasks for all learners?
— "Teaching up"?
— Using flexible grouping?

• How did the teachers who developed these units seem to have decided when to use whole-class instruction and activities and when to differentiate instruction and activities?

• Where in each unit might you incorporate additional ways to differentiate content for particular students in your class or classes? What about additional ways to differentiate process? Products? Which instructional strategies that your students currently enjoy using would you want to integrate into these units?

• Where in each unit might you incorporate additional ways to address student readiness? Interest? Learning profile?

• In what ways do these units call for flexible use of space? Of materials? Of time?

• What classroom guidelines would you want to establish to ensure effective and efficient work in one or more of these units? How would you begin the process of developing a flexible but orderly learning environment in one of these classrooms? How might you enable your students to be your partners in establishing a flexible and differentiated classroom?

• Think about connections between student affect and differentiation as it's reflected in these units. In what ways is the general classroom tone (where you teach) likely to impact student affect? Why? In what ways is the differentiation likely to impact student affect? Why? What connections do you see between student affect and student learning?

• What is the role of the teacher in these differentiated classrooms compared with classrooms in which whole-class instruction predominates? What opportunities do teachers enjoy with flexible teaching that may not be so readily available in more traditional classrooms?

• What portions of your own curriculum do you recognize in these units? In what ways can you build on what you already do in order to address the learning needs of your full range of students?

• Which elements of these units do you particularly like? Which do you question? Talk with colleagues about what you see as positive in the units and what is less positive for you. In each instance, be sure to explore why you feel as you do.

• Try adding your voice to a unit you have on paper, explaining why you have crafted the unit as you have—or why you might now think about modifying the unit in some way.

• Be sure to apply in your classroom what you learn from the units in this book. It's wise to move at a pace and in a sequence that seems manageable to you—but it's important to grow as a teacher!

* * *

Our great hope, of course, is that you will be "stretched" by the time you spend with these six units. As educators, we invest our professional lives in the belief that learning is both dignifying and humanizing. We hope this will be your experience in the pages to come.