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Teachers at Work Building Differentiated Classrooms

Students do not simply store knowledge they hear; each student learns in a particular, personal way. Each child gives personal shape to his or her understanding and to the way that he or she comes to understand things. . . . The teacher may be teaching a class of 35 students; but it is always important to remember that all learning is ultimately an individual process.

Max van Manen, *The Tact of Teaching*

Teachers in the most exciting and effective differentiated classes don't have all the answers. What they do have is optimism and determination. They are dogged learners who come to school every day with the conviction that today will reveal a better way of doing things—even if yesterday's lesson was dynamite. They believe they can find this better way by aggressively searching out and examining the clues implicit in what they do. This conviction guides all aspects of their work, every single day.

These teachers shun "recipe" teaching. They know that even if they do filch an idea from someone else's stores (a time-honored and defensible practice among teachers), they must adapt it for their own learners' needs, fit it

to essential learning goals in their own classroom, and polish it so it becomes a catalyst for engagement and understanding among their own students. Longtime teacher Susan Ohanian (1988) expands on this point, drawing on Confucius's admonition that someone can reveal to us "one corner" of understanding, but we must find the other three ourselves:

> I know plenty of teachers who are disappointed, indignant, and eventually destroyed by the fact that nobody has handed them all four corners. . . . It is up to us to read the research and to collaborate with the children to find the other three corners. And because teaching must be a renewable contract, if we don't keep seeking new understanding, we'll find that the corners we thought we knew very well will keep slipping away. There are constant, subtle shifts in the schoolroom. One can never be sure of knowing the floor plan forever and ever. (p. 60)

Chapters 6, 7, and 8 offer examples of differentiated curriculum and instruction to illustrate the key principles of differentiation (see Figure 6.1). Please note that these are not ready-made lessons to be transported into other classrooms; they simply reveal one corner of the differentiation process. The success of the teachers profiled rests on their developing and maintaining a learning environment that invites students to do the hard work of learning and consistently supports them in that journey. The other keys to their success include compelling curriculum with clearly articulated learning goals that are centered on student understanding, persistent assessment that aligns precisely with designated learning goals and informs teacher understanding of student development toward and beyond critical goals, and instructional planning that is responsive to both students' needs and content requirements.

Figure 6.1 Key Principles of a Differentiated Classroom

- An invitational learning environment is pivotal in student achievement.
- Quality curriculum provides the foundation for powerful differentiation.
- Formative assessment informs teaching and learning.
- Instruction is based on formative assessment information and responds to readiness, interest, and learning profile needs.
- Teacher leadership and flexible classroom routines prepare students to understand, contribute to, and succeed in a differentiated environment.

The examples also illuminate the heuristic thought processes of these teachers and their approach to differentiating instruction. This is intended to support you, as a teacher, in your search for the "other three corners" with your particular students, in your particular subject areas, and according to your particular personality and your needs as an educator and a human being.

Differentiating: The What, How, and Why

There are three questions that are very useful in analyzing differentiated curriculum and instruction: *What* is the teacher differentiating? *How* is the teacher differentiating? *Why* is the teacher differentiating?

What is the teacher differentiating? This question focuses us on the curricular element the teacher has modified in response to learner needs. It might be one or more of the following:

- Content—what students will learn or how the students will get access to the information, skills, and ideas that are essential to understanding and using those elements;
- Process—the activities through which students make sense of key ideas using essential knowledge and skills;
- Product—how students demonstrate and extend what they know, understand, and can do as a result of a segment of learning; or
- Affect/learning environment—the classroom conditions and interactions that set the tone and expectations of learning.

How is the teacher differentiating? This question focuses us on the student trait to which the differentiation responds. Is the teacher differentiating in response to student readiness, interest, learning profile, or some combination of the three? Any learning experience can be modified to respond to one or more of these student traits.

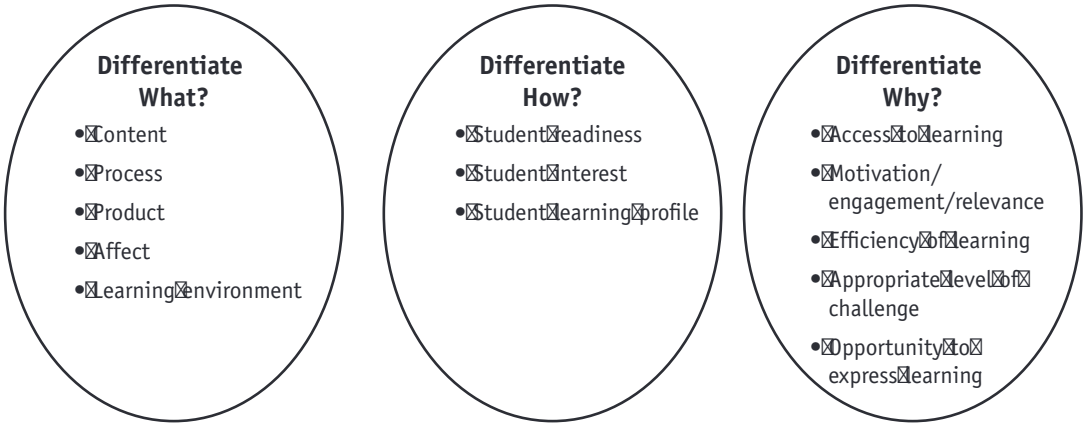
Why is the teacher differentiating? Here, we consider the teacher's reason for modifying the learning experience. Is it to support access to learning? To increase student motivation to learn? To improve the efficiency of learning? Any or all of these three reasons for differentiating instruction can be tied to student readiness, interest, and learning profile.

Students can't learn that which is inaccessible to them because they have no way to understand it. They can't learn when they are unmotivated

by material that is consistently too difficult or too easy. We all learn more enthusiastically those things that connect to our interests and experiences; we learn more efficiently if we can acquire information, practice skills, make sense of ideas, and express our understanding through a preferred mode.

Some of the examples of differentiation that follow reflect modest, though important, modifications of curriculum and instruction. Others are more elaborate. Each section is followed by an analysis of what the teacher was thinking in planning this response to student needs—the what, how, and why. You might find it interesting to do your own analysis before reading the one provided. In Figure 6.2, you'll find a reminder of the three key questions and the elements to consider.

Figure 6.2 Differentiating: What, How, and Why



Differentiating Fact- or Skills-Focused Instruction

Consistently teaching skills in isolation can strip learning of relevance and power. Yet there are times in most classes when teachers appropriately opt to have students practice with facts or with a specific skill. In good scenarios, teachers then ask students to complete meaning-rich tasks or knotty problems using the information or skills, introducing the more meaningful tasks or problems prior to the practice so students can see purpose in the more rote work they are asked to do.

Because in any class, student readiness for particular information or skills is varied, teachers need to differentiate how students practice those elements.

Here are some examples of teachers differentiating fact- or skills-focused assignments based on their assessment and understanding of students' points of entry.

Grade 1 Science: Classification

Yesterday, Mrs. Lane's 1st graders took a nature walk to gather objects they could think about as scientists might. Today, they will work in groups to classify the items they found on their walk.

All students will first classify items as living or nonliving. Then, within those categories, students will classify by other similarities (such as shape, size, color, and type of object). Mrs. Lane has made one adaptation at several tables. Some of the younger 1st graders will classify only the actual objects. At other tables, she has replaced some of the objects with cards that bear the object's name. This is for early readers excited about their newly evolving skill. Based on their readiness to decode the object names, several of the early readers have one or two cards, and others have many.

Differentiating what? The task as a whole enables students to practice and make sense of what it means to compare and contrast. Mrs. Lane is differentiating process.

Differentiating how? She is differentiating process based on her ongoing assessment of students' reading readiness.

Differentiating why? Mrs. Lane wants her young readers to have as many chances as possible to use their reading skills. The word cards also help nonreaders; when students at the various tables share how they classified the items, the nonreaders encounter examples of object–word connection, which is essential to learning to read.

Grade 4 Language Arts: Proofreading

Mr. Mack's 4th grade classroom includes a learning center designed to support students in refining their ability to detect and correct errors in punctuation, spelling, and sentence structure. The proofreading center has a collection of stories that Mr. Mack has written to engage students at different reading levels. Sometimes students find messages from characters in stories they are reading, from people in current events, from Mr. Mack himself, or from the gnomes and trolls Mr. Mack declares inhabit the classroom's crannies to observe what goes on. Mr. Mack, of course, writes these pieces with humor, a dash of wisdom, and different types of errors, depending on which students will be called upon to edit them. The complexity of the prose varies as well.

At other times, students leave their own writing in an in-box at the proofreading center so peers can help them polish their drafts. Mr. Mack screens these pieces too, asking particular students to review certain papers, which he knows they can respond to in a meaningful way based on the author's needs and the reviewer's proficiency.

Differentiating what? Skills-based practice is the focus of teacher assessment. Mr. Mack differentiates the process so that the particular punctuation, spelling, and sentence structure requirements are a good match for students' skill needs. At the same time, he is ensuring appropriately challenging reading readiness levels. In both instances, he is differentiating content.

Differentiating how? Mr. Mack's differentiation is based on readiness, which in this case targets proficiency in punctuation, vocabulary, and sentence structure. Keenly aware of student interests, he has a great time dashing off error-ridden notes from book characters, sports heroes, or gnomes, knowing these notes will strike a chord with particular learners. In addition, he matches topics of student writing with reviewer interest whenever he can. The approach works. Students look forward to proofreading in Mr. Mack's class.

Differentiating why? Mr. Mack's students have different skill needs in writing and proofing. Varying the errors in the materials he prepares provides an efficient way to move students along the skills continuum as quickly as possible. He also avoids undue boredom from unnecessary repetition of previously mastered skills and circumvents the confusion that occurs when the skills called for are beyond a student's readiness. His awareness of student readiness related to spelling, sentence structure, and punctuation allows him to convene various small groups for direct instruction on particular skills, and he can bring together groups with similar tasks for the purpose of checking work. Further, his students are highly motivated by his humor, reading level match, and the chance to help a peer do better with writing.

Grade 2 Language Arts: Alphabetizing

Ms. Howe has built several alphabetizing boards with the heads of large nails protruding from brightly colored plywood. Students practice their alphabetizing skills by hanging words on the nails in appropriate order.

Ms. Howe gives a student a cup of round, paper key tags with metal rims. Each tag has a word to be alphabetized. Some cups contain unfamiliar words with few syllables and distinctly different initial letters. Others contain words that closely resemble one another in spelling or configuration. Sometimes she puts a made-up word on a tag, and students are rewarded if they spot

the phony word and can "prove" to the class why it's fake (by citing a rule or using a dictionary entry as evidence).

Differentiating what? The activity, or process, stays essentially the same. It's the material, or content, that varies.

Differentiating how? Again, skill readiness is the focus of differentiation. For one student, ordering words like *car* and *cap* presents a considerable challenge. For another, words like *choose* and *chose* or *library* and *librarian* are more appropriately challenging.

Differentiating why? Here, too, efficiency of learning and access to understanding are important to the teacher. Ms. Howe tries to meet students where their skills currently are, and she wants to help each child move on as rapidly as possible. It's important to remember that one set of materials may have a long life-span. A cup of tags that challenges a grade-level reader in September may be just right in December for a student whose skills are developing more slowly.

Grade 8 Physical Education: Volleyball Skills

Mr. Grant often organizes whole-class volleyball games in his physical education classes so his students can learn to function as a team. At other times, he divides the class in half. At one end of the gym, students play a volleyball game. Mr. Grant asks different students to referee these games: students with leadership skills and students who are comfortable with the sport. At the other end of the gym, he assembles a group of students who need to perfect a common skill, such as setting the ball, spiking the ball, or receiving the ball without shrinking from it. Students in the groups for direct instruction vary often and widely.

Differentiating what? Mr. Grant is differentiating the opportunity students have to develop mastery of specific skills. Both the particular skill (content) and the small-group activity (process) vary.

Differentiating how? In large measure, he is focusing on student readiness in a skill. He also may be attending to student learning profile when he gives students with leadership strength an opportunity to hone those skills.

Differentiating why? Students feel better about their participation in a sport when they can develop their prowess in it (motivation). They have greater access to that opportunity when their individual needs are addressed in a systematic, focused way for at least some of the class time.

High School Biology: Vocabulary Development

Ms. Cunard's biology classes include a number of students who are learning English as they also work to master the content of biology. She often "front-loads" vocabulary with these students prior to the beginning of a chapter or unit of study. In many instances, she finds it helpful to include in the front-loading discussions students whose text comprehension is weak, students with learning disabilities for whom complex vocabulary is a challenge, and other students who struggle with vocabulary for a variety of reasons.

Sometime before beginning a unit, Ms. Cunard meets for about 15 or 20 minutes with the students who are likely to benefit from front-loading. Other students work individually or in small groups on teacher-assigned tasks related to their current unit of study.

She presents to the smaller group six to eight vocabulary words that will be critical to their understanding of the upcoming unit. To help students unlock meaning in the words, she asks questions; provides examples, using familiar words that sound like the new vocabulary; highlights context clues; or helps them learn to use root words. The goal of the small-group work is to develop definitions that are clearly and succinctly written in words that are accessible to the students. Ms. Cunard will put the words on a "key word" bulletin board and will refer to them often through the unit.

Differentiating what? Ms. Cunard is differentiating both content and process. Content differentiation is not in the material itself but in the timing of the material's introduction. She is differentiating process in providing scaffolding for students who need it, while enabling students who can master the vocabulary more independently to do so.

Differentiating how? Front-loading is generally differentiation based on readiness. In some cases, however, Ms. Cunard includes in front-loading discussions students who learn best when in small groups (where focus is easier for them to maintain) or students who learn much more readily aurally than through reading.

Differentiating why? Ms. Cunard does not front-load vocabulary with the whole class; some students already know the words, and others can learn them from text and class discussions—goals she has for all her students. Her goal is to move all her students forward in both knowledge and learning skills, not to have some of them march in place or move backward. Front-loading key vocabulary enables her to provide scaffolding for students who need it at a given time without creating "backward momentum" for others.

High School World Languages: Understanding Grammatical Patterns

A pattern-focused exercise for Mrs. Higgins's German I class emphasizes formation and use of past-tense verbs. But Mrs. Higgins's students vary quite widely in speed and facility with learning a foreign language.

One group of students having difficulty with grammatical concepts in general, and German in particular, will work with pattern exercises in which much of a German sentence is supplied. However, each sentence uses an English verb, and students must supply the correct form of the past-tense German verb. Occasionally, an English noun or pronoun also appears, and students must supply the correct German verb. Mrs. Higgins has ensured that the missing verbs are regular and that other missing elements are essential to basic translation and conversation.

A second, somewhat more proficient group has a similar activity. But they will encounter a greater number and complexity of missing words, including a few irregular verbs. A third group of students works with the same sentences as the second group, but virtually all of the sentences are in English and must be translated into German. Two or three students in Mrs. Higgins's classes don't need the skill exercises because formative assessment and class observations indicate these students have already mastered these forms. She gives these students a scenario to develop, with instructions about the sorts of grammatical constructions that must be included. They may develop the scenario for written or taped presentation. A task that one group completes today may become homework for a less advanced group within the next few days.

Differentiating what? Students are practicing with varied content. Although all the students focus on past-tense verbs, their assignments vary other sentence and vocabulary elements.

Differentiating how? Student readiness is targeted, based on proficiency in providing basic grammatical constructions.

Differentiating why? Some of Mrs. Higgins's students need an additional, guided chance to practice basic, regular verb formation before moving on to other challenges. Other students are ready to grapple with the more complex and unpredictable irregular verbs; they can draw on a greater range of sentence elements and vocabulary. When she varies requirements by degrees of complexity, independence, and open-endedness, Mrs. Higgins ensures that all students escalate smoothly in skill from their current comfort levels. Having

students work with readiness-appropriate tasks also enables her to better target direct instruction and monitor small groups. This process, which she uses every few days, ensures that students struggling with German don't add to their confusion and sense of failure by skipping steps of understanding. It also ensures that quick learners don't "stand still" and develop a sense of complacency with the language. It enables all students to work more competently and confidently with oral and written application tasks that are central in the class.

Grade 6 Language Arts: Spelling

Ms. Estes pre-tests her students on spelling in September. Typically, she identifies both students who work with 2nd grade words and those who top out on an 8th grade list, as well as the range in between. She uses a spelling procedure that is the same for all students, but each student works on a particular list indicated by current spelling performance. She color-codes the lists rather than labeling them with grade equivalents.

Students have a spelling notebook in which they write 10 words from their spelling list. Students create sentences with their words; have a peer check them; correct errors; take them to Ms. Estes for a final check; correct any remaining errors; write each word five times; and then take a quiz on the 10 words, which is administered by a peer. Any words missed become part of their next list. Ms. Estes gives individual survey tests on numerous past lists on a rotating basis. Again, misspelled words are "recycled" onto the next list.

The repetitions in this procedure prove to be quite effective in helping students internalize key spelling patterns. Students who demonstrate proficiency with 8th grade words at any point in the year work with a vocabulary procedure that emphasizes root words and derivatives from a variety of languages that have contributed to the evolution of English. In two of her classes, there are students for whom Ms. Estes is currently their primary spelling partner. They sit in an area of the classroom she often uses for student conferences so she can get to them easily. She checks in with them often and provides goals for work completion. These students may have individualized education plans that specify specific language goals; others are students who have difficulty collaborating with peers. When appropriate, she likes to have students check each other's work, but when that seems ill advised, she checks the work herself. As the year progresses and students become more

comfortable with classroom routines, Ms. Estes will modify these students' work plans to allow interaction with a larger number of classmates.

Differentiating what? Ms. Estes is differentiating content by varying the spelling lists. The process or activity remains the same for all students, except for those who have tested out of spelling. For them, both content and process are modified. She is also modifying learning environment (seating arrangements) and affect (teacher-provided structure to support safety and achievement) for students who are not currently ready to work independently in the class at large.

Differentiating how? All of the spelling differentiation is based on ongoing assessment of student readiness.

Differentiating why? This procedure provides access to growth for all students at a rate appropriate for them individually. Independence and peer assistance are both quite motivating to the middle schoolers.

Grade 7 (All Subjects): Reviewing to Cement Facts and Skills

Blitzball is a big hit on the 7th grade team. A number of teachers use it to review ideas and information and to help students latch onto important knowledge and understandings.

Using teacher review guides, students work in mixed-readiness groups of four to six to make sure they know and understand key information. Then the teams compete in Blitzball: the teacher calls on a student, who comes to a line made of masking tape. The teacher asks the student a question. When the student answers correctly, he earns a chance to throw a tennis ball at a brightly painted plywood backboard with four small holes at each corner and a large hole in the center. Hitting the board gets one point for the team, sending the ball through the center hole nets three points, and a team earns five points when the ball goes through one of the small holes.

Students in the audience who talk during the game lose five points for their team. All the students stay alert for toss-up questions and opportunities to challenge answers for points. Teachers adjust questions based on students' level of understanding and skill to ensure that all students are appropriately challenged and have a fair chance to earn team points.

Differentiating what? Content is differentiated; the activity or process remains constant.

Differentiating how? The teacher differentiates by student readiness in the particular content at a particular time.

Differentiating why? Students are highly motivated by the fast-paced game, and they are even more motivated because everyone has an equal chance of earning a toss. An interesting additional motivator stems from the reality that capacity to throw a ball skillfully does not necessarily correlate with student readiness in a subject; maximum points are often earned by students who may not be academic stars.

Other Principles Reflected in the Examples

Skills-based activities are not always high on the engagement scale. But many teachers have been effective in making their activities user-friendly with humor, opportunities for movement, and student collaboration. In all of these instances, the activities are equally respectful in that one version doesn't look preferable to or less desirable than another. Although every student is squarely focused on the skill the teacher deems essential to practice, the activity in which the practice occurs is designed to be appealing for everyone.

These examples also illustrate teachers using ongoing assessment of student readiness, interest, and learning profile for the purpose of matching task to student need. They do not force-fit students to tasks. Readiness relates to a particular competency at a particular time; it does not equate to a statement about a child's overall capacity as a learner. Tasks change often and students are not grouped or seen as "slow learners" or "smart kids."

A child who is a very apt thinker in literature may have difficulty spelling. A student who spells well may have difficulty with reading comprehension. A child who has a beastly time writing German sentences may do quite well with oral language. Some students struggle with many things, and others are advanced with many things, but most have areas in which they are more fluid and others in which they are less fluid. It is fairer and more accurate to look at readiness for a specific skill at a given time instead of using one skill to make a judgment about general ability.

Teachers in these illustrations are crafting escalators of learning. They do not assume there is one spelling list for all 6th graders, one set of volleyball skills for all 7th graders, or one set of sentences for every novice German student. These teachers demonstrate a systematic intent to find students who are one floor—or two or three—below performance expectations and to move them up with minimal gaps and no sense of despair. There is also systematic intent to find learners who are a floor—or two or three—above performance expectations and to move them further upward with minimal

"marching in place" and a sense that learning is synonymous with striving and challenge.

Differentiating Concept- or Meaning-Based Instruction

The principles and beliefs reflected in the previous section are still at work in the examples of differentiated instruction that follow. However, the next examples demonstrate a teacher's intent to integrate several or all levels of learning—facts, concepts, principles, attitudes, and skills. These teachers also differentiate curriculum and instruction from that very rich starting point, which focuses all students on making meaning of (or understanding) what they are learning.

Grade 12 Government: Evolution of Government and Societies

Over a period of three weeks, seniors in Mr. Yin's government class are conducting research in groups of three to five. Their goal is to understand how the Bill of Rights has expanded over time and its current impact on various groups in society. Continuing an ongoing exploration of the concept of change, they will explore the principle that the documents and institutions that govern societies change to meet the demands of changing times. The project requires them to work with skills of research and expository writing.

Mr. Yin has placed students in "investigation groups" of somewhat similar reading readiness (e.g., struggling readers to grade-level readers, grade-level readers to advanced readers). All research groups will work on and off over three weeks as the unit progresses, examining issues such as

- How one or more amendments in the Bill of Rights became more inclusive over time;
- Societal events that prompted reinterpretation of one or more amendments in the Bill of Rights;
- Court decisions that redefined one or more of the amendments;
- Current interpretations and applications of one or more of the amendments; and
- Unresolved issues related to the amendments.

Mr. Yin's students have a common rubric for the structure and content of appropriate writing, and every student will develop a written piece that

stems from what they learn from their group's research. A wide range of print, Internet, video, and audio resources is available to all groups.

Despite common elements in the assignment, Mr. Yin has differentiated the work in two important ways. Some groups will research societal groups that are familiar to them, areas where issues are more clearly defined, or areas where there is more information available on a basic reading level. Other groups will examine unfamiliar societal groups, issues that are less defined, or issues where resources are more complex.

Students may choose to write an essay, parody, or dialogue to reflect their understandings. They may also propose another format. Mr. Yin provides brief guidelines for each form as well as a rubric that specifies expectations across forms.

Differentiating what? Although questions in the activity remain constant, the lenses through which students investigate those questions vary. In that way, the teacher has differentiated process. The culminating product offers variety in mode of expression. Content varies in that students will use a range of resources at varied levels of reading complexity.

Differentiating how? Mr. Yin has modified instruction based on students' sophistication in reading, writing, and abstract thinking. (He could have modified for interest as well, by encouraging students to select a societal group in which they were particularly interested.) The three product options address both readiness and learning profile. The essay is likely to require less complex thought and manipulation of language than the parody. Some students might be more drawn to the dialogue format than to the essay format. Although the option for students to propose an alternative format allows them to work with video, web-based presentations, annotated art forms, and so on, the criteria for required content and skills remain constant across formats.

Differentiating why? Mr. Yin sees access to materials as an important issue. Research materials and sources differ greatly in complexity, and issues can differ greatly in clarity. By matching students to materials and issues, he maximizes the likelihood that students will come away appropriately challenged. They also will have a grasp of essential concepts and principles. Similarly, he has provided product options at varying degrees of difficulty. Making some choices for the product himself and encouraging students to make others balances Mr. Yin's role as diagnostician with students' needs to make decisions about their own learning.

Grade 1 (All Subjects): Patterns

Mr. Morgan and his 1st graders look for patterns in language, art, music, science, and numbers—everywhere they go and in everything they study. They understand the principles that patterns use repetition and that patterns are predictable. Today, Mr. Morgan and his students are working with patterns in writing.

As a whole class, they have looked at how writers like Dr. Seuss use language patterns. They've clapped out the patterns together; recited them; and talked about sounds, words, and sentences. They have listened to their teacher read part of a pattern in a book, and they have predicted what might come next.

Mr. Morgan just read his students *The Important Book* by Margaret Wise Brown (1949), which also uses patterns. The pattern it uses is "The important thing about _____ is that it is _____. It is _____. It is _____. And it is _____. But the important thing about _____ is that it is _____." (For example: "The important thing about night is that it is dark. It is quiet. It is creepy. And it is scary. But the important thing about night is that it is dark.")

Now the 1st graders are going to make an Important Book for their class, showing how they can use writing patterns. Mr. Morgan will have them work in groups to develop the pages. Some students who need more assistance with the concept of a pattern and with writing itself will work with him to select the important object they will write about. He will guide them as they tell him what to write on chart paper, making sure they work together to select a topic, describe what's important about it, and complete the pattern. He also will have them take turns reading their page, individually and as a group, and he will have each student talk about the repetition in the pattern and how it is predictable. Once the chart page is completed, Mr. Morgan will convert it into a book-sized page that matches others being created in the class.

Some students will work in pairs to complete a template that Mr. Morgan has created. They will select their own language to complete the template and do the writing themselves. However, Mr. Morgan has given these students a list of nouns and adjectives from which they can draw if they "get stuck." A few students in the class are very advanced with writing. Their job is to create a page for the book "from scratch." They may refer to the original book if they need to, but most will develop the page from memory and can manage the writing adequately on their own. Mr. Morgan has provided these students with challenging criteria for their work, and they will submit drafts

of their work to peers and to him for suggestions on enhancing the quality of their initial drafts.

Mr. Morgan will ask students from all working groups to read their pages to the class at some time over the next few days. He'll use this opportunity to have students talk about what a pattern is and how patterns are used in their book. Students will work together in heterogeneous reading groups to illustrate the book pages, make a cover and title page (both of which are examples of patterns in books), bind the book, and add it to a growing collection of books about patterns they have created for their class library.

Differentiating what? Content in this scenario stays basically the same; all students are working with the same concept and principles, and all are working with skills of writing. The process varies, as Mr. Morgan provides varied levels and kinds of support and guidance in making the book pages.

Differentiating how? Based on his assessment of student proficiency in writing and in developing patterns in writing, Mr. Morgan differentiates the activity in response to student readiness.

Differentiating why? In most 1st grade classes, students demonstrate a wide range of language skills. In this case, all students need a chance to explore patterns, recognize patterns, contribute to pattern formation, work with writing skills, and contribute to the work of the class. However, to be appropriately challenging for the full span of language development, the writing task needs to be provided at varying degrees of structure and with varied degrees of support in order to respond to varied stages of language development.

Grade 9 U.S. History: Revolution and Change

Mrs. Lupold and her 9th graders are studying the Industrial Revolution in the United States. She has developed a concept-based unit that attends to student commonalities as well as their differences in readiness, interest, and learning profile. This unit (and others throughout the year) is based on ideas such as interdependence, change, revolution, and scarcity versus plenty. Students will examine principles such as

- Changes in one part of a society affect other parts of the society;
- People resist change;
- Change is necessary for progress;
- When members of a society have uneven access to economic resources, conflict often arises; and

• The struggles of one historical period are much like those of other historical periods.

Among the skills emphasized are comprehension of text materials, note taking, analysis, and identification and transfer of historical themes. Knowledge includes key events of the Industrial Revolution, causes and effects of the time period, and vocabulary related to the time period.

Without telling students the name of the "new" time period they are about to study, Mrs. Lupold asks students to work with classmates at their assigned tables (random seating) to create a web or mind map of what was going on in history as their previous unit concluded. This helps them use what they already have learned to build a foundation for what is to come.

She invites students who like to read aloud to volunteer to take home excerpts from two novels. They can practice reading aloud so they will be prepared to read for the class the next day. She offers students who have difficulty reading selections from *Lyddie* by Katherine Paterson (1991), which are manageable by most students with below-grade reading skills. She offers stronger readers passages from *The Dollmaker* by Harriett Arnow (1954), a book for adult-level readers.

The next day, the student volunteers read powerful passages from the two novels describing living conditions during the Industrial Revolution in the United States (although the term itself isn't used). Using the think-pair-share-square strategy, Mrs. Lupold presents the pivotal question to the class: "What could possibly be going on in our country to have people living this way?" Students individually write about their ideas for two minutes, then turn to a thinking partner of their choice (someone close, so no walking is involved). They discuss their thoughts for two minutes, and then each pair is joined by another pair for a four-way exchange. After discussing the question for two more minutes, Mrs. Lupold poses the question again for whole-class discussion.

Eventually, she helps students link what they heard in the novels with the webs they drew the day before. She tells them the new period is called the Industrial Revolution, and she helps them speculate how that name predicts what will happen in the novels. They end class by creating a chart listing the things students know about the Industrial Revolution, things they think they know but aren't sure of, and things they want to know as their study progresses.

The next day, students watch a video about the time period and then select one of four journal prompts to complete in their learning logs. The prompts, all dealing with change, are at varying degrees of difficulty, but students are free to write on whichever prompt they choose. They then read their textbook and take notes on their reading using one of three organizers distributed by the teacher. The amount of structure in the organizers varies, and they are distributed based on Mrs. Lupold's ongoing assessment of students' skill with reading text materials.

As students read, Mrs. Lupold calls small groups to sit with her on the floor in the front of the room. She works with them on key vocabulary, interpretation of key passages, and direct reading, again based on her awareness of their needs as readers. When students complete reading a chapter, she gives them a quick formative assessment. At this point, the assessment is not for a grade but to better understand how to assign students to a key activity she is planning for the next couple of days.

Throughout the year, Mrs. Lupold works with students to identify and transfer key themes of history, guiding them to understand that people in one period have experiences much like those in others. As part of the current unit, Mrs. Lupold's class explores Paul Fleischman's *Dateline: Troy* (1996), which matches passages from *The Iliad* with clippings from modern newspapers and magazines to demonstrate how closely the events of today parallel those of the ancients. Although Fleischman's book deals with a period other than the Industrial Revolution, it reinforces the idea that the struggles of one period are much like those of another; this concept is the basis for the small-group activity that follows.

Based on student knowledge and understanding of essential information in the unit to this point—and based on her awareness of their proficiency in reading and thinking about history—Mrs. Lupold assigns students to one of four groups (Groups T, R, O, and Y). Each group will identify key themes in the Industrial Revolution and compare the themes to current events. The activity for each group is slightly different, designed to match students' level of readiness.

Group T's activity will imitate Fleischman's *Dateline: Troy*. Their instructions, which include examples of "important things," read as follows:

> The author shows us that a lottery was used to determine who joined the army 3,000 years ago and in the Vietnam War. Now, work in pairs and take

> a second look at the video on the Industrial Revolution. Use it and the textbook to find important things that happened during that time. Check your list of key themes with me before going ahead with the rest of the assignment. What you'll do then is watch TV news programs and find current events similar to what was happening in the Industrial Revolution.

Group T students use a three-column grid provided by Mrs. Lupold to list a key event in the Industrial Revolution, a current event, and how the two are alike. As a culminating project, they will show their classmates a news clip and explain how the event in it is like an event in the Industrial Revolution. Mrs. Lupold encourages them to develop a visual of their grid (for the overhead or as a large poster) or make a graphic organizer to use during the explanation. All students in the group need to be ready to present information.

The instructions for Group R first have them connect the right- and left-hand pages in *Dateline: Troy*. (For example, "What is the problem shared by Achilles on page 48 and Darryl Strawberry on page 49?") Next, they think about key events in the Industrial Revolution and search sources such as *Time, Scholastic News, Newsweek,* and online newspapers to find five possible matches. They will select their two best matches, defending to the teacher why the two are "best" before they continue. Ultimately, they will create two parallel pages for a book called *Dateline: Industrial Revolution*, which will list events from the Industrial Revolution on the left-hand pages and collages of articles from "matching" news sources on the right. Students can use cartoons, computer graphics, headlines, and drawings along with the news articles themselves. All students in the group have to be ready to present, explain, and defend the pages to classmates.

Students in Group O also look at *Dateline: Troy* with the intention of creating a parallel book excerpt for the Industrial Revolution. They will select eight or so events from the Industrial Revolution that demonstrate the revolutionary nature of the time. Then, they will identify parallel "revolutions" in this century, create or find collage materials that make the parallels clear, and devise a way to both tell and show the parallel nature of the two revolutions in their own book. Students have to clear their plans for the book segment with Mrs. Lupold before executing them. They will focus on using insightful language and visuals, and all members of the group have to be prepared to share and interpret their creation.

Group Y students' instructions are as follows:

> The period we are studying is called the Industrial Revolution, yet there was no army or fighting as in the French Revolution, American Revolution, or Russian Revolution. It's also possible for individuals to have revolutionary experiences. Using *Dateline: Troy* as a model, develop a way to think about and show what you would consider to be essential elements in any revolution (such as rapid change, fear, or danger). Your comparison must include the Industrial Revolution, an individual revolution, and a military revolution. It must use important, valid, and defensible themes. It also must be effective in communicating your ideas: accurate, insightful, articulate, visually powerful, and easy to follow.

As the unit draws to a close, Mrs. Lupold presents a lecture on the Industrial Revolution to highlight information, ideas, and themes she wants to reinforce. She uses a learner-friendly format, planning the flow of her lecture, displaying a graphic organizer that follows the lecture sequence (to guide note taking), and delivering the lecture in segments of about five minutes. She follows each segment with a class discussion and summary of key points, a key question for students to consider, or a prediction for students to make based on what they are hearing and thinking.

Next, students in Groups T and R use their tiered activity materials to help her demonstrate how the Industrial Revolution isn't so different from today. Then the class continues to explore the idea through four-by-four sharing. Sharing groups combining students from each of the four tiered activity groups use their dateline materials to illustrate the following:

- How the Industrial Revolution relates to our lives;
- Key events in the Industrial Revolution;
- Key themes or elements in the Industrial Revolution; and
- How the Industrial Revolution was revolutionary.

Mrs. Lupold does not assign questions to particular students, but by virtue of the tiered activity, every student is prepared to answer at least one question.

Students then complete a paired review for a quiz on the unit, using a study guide that includes important vocabulary, events, and themes. Students can self-select partners for review. But the quiz is not the sole assessment of students' grasp of the unit. They have also just completed individual products

they began about three-quarters of the way through the unit. The product assignment asked students to develop a way to show a revolution in a person's life, the last 50 years, culture, a subject or a hobby area, or the future.

Students' products illustrate how key concepts and themes (change, scarcity and plenty, interdependence, danger) were reflected in the revolution they explored. Students express their findings and understandings of parallels to the Industrial Revolution through research papers, models, creative writing, drama, music, and other formats. For this assignment, they could work alone or in groups of up to four. Mrs. Lupold provided rubrics to ensure that the products all focus on essential knowledge, understanding, and skill. She also encouraged students to add to the rubrics specific criteria for their products and to present their expanded version to her for approval.

Differentiating what? Throughout the unit, Mrs. Lupold differentiates content (e.g., using videos as well as text materials), process (e.g., the tiered activity based on *Dateline: Troy*), and product (e.g., the product assignment that allowed different expressions of key understandings).

Differentiating how? Mrs. Lupold differentiates her teaching in response to readiness by offering novels on two levels for volunteers to read aloud and varying the concreteness/abstractness and structure/openness in the tiered assignment. She differentiates for interest through options for product applications and modes of expression. She differentiates by learning profile by giving students choices of working conditions for the product and when she calls on varied learning strengths in the tiered activities.

This is a teacher who demonstrates many key principles of differentiation. All students undertake respectful activities that are interesting, focus on essential ideas and skills, and are likely to promote both challenge and success for students with varying needs. Students work in many different groupings: randomly at their tables, with thinking partners of their choice, with another thinking set, alone, with students of like readiness, and with students of mixed readiness. The groupings shift according to both teacher choice and student choice.

Differentiating why? Mrs. Lupold knows that if she supports struggling learners (by using videos to supplement text materials, breaking a lecture into accessible parts, providing a review guide, or building more structure into the tiered assignment), they will be able to move from a concrete look at the events of the Industrial Revolution to a more abstract application. She also makes certain that advanced learners are challenged by offering

advanced reading materials at several points, providing a very abstract and multifaceted version of the tiered assignment, and allowing opportunities for advanced students to work with peers of similar readiness. Although the lesson focuses on skills in reading, writing, and interpretation at varying levels, the conceptual focus of the unit is meaning-rich for all students. All of Mrs. Lupold's efforts make the Industrial Revolution more meaningful and memorable.

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In all the examples of differentiation described in this chapter, teachers were clear about the essential facts, skills, and understandings (concepts, principles) that framed their subjects. The teachers also continually sought information to help them understand each student's point of entry and progress and then attempted to match curriculum and instruction to each learner's readiness, interest, or mode of learning. They wanted to provide students the opportunity to learn coherently, at an appropriate level of challenge, and in an engaging way. Each teacher wanted to link the learner and the learning, an important goal that's sometimes uncommonly difficult to envision amid one-size-fits-all classrooms.