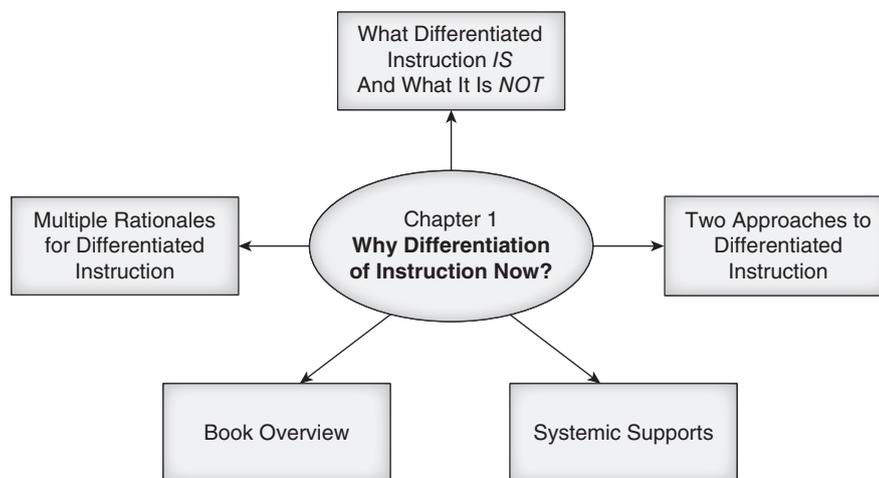

Why Differentiation of Instruction Now?

Figure 1.1 Content Map for Chapter 1



Learning is the process of preparing to deal with new situations.

—Alvin Toffler, American writer and futurist

Why did we decide to write this book? We wrote this book for you—classroom teachers, special educators, English language learning specialists, math and literacy coaches, curriculum coordinators, administrators, teacher librarians, and teacher educators—because we wanted to provide you with a valuable resource to meet the needs of an increasingly

diverse student body. As echoed by Alvin Toffler's wise remark, we believe that you are in a constant process of learning to prepare yourselves and your students to deal with new situations.

WHAT DIFFERENTIATED INSTRUCTION IS (AND WHAT IT IS NOT)

Differentiated instruction is *not* standardized instruction geared to the mythical average learner. Differentiated instruction is *not* adding extra assignments to keep students busy. Differentiated instruction is *not* all students doing the same thing, in the same way, at the same time. Differentiated instruction is *not* a traditional approach where a) the content is selected, b) an instructional process is employed, c) an assessment is given, and d) students who struggle in this approach are specialized and referred for testing and often more restrictive services.

In contrast, differentiated instruction *is* a frame of mind and is described as a teaching philosophy based on the premise that teachers should adapt instruction to student differences because "one size does not fit all" (Willis & Mann, 2000).

Differentiated instruction is a way to shake things up in the classroom, changing how students learn and how teachers teach. According to researchers at the National Center on Accessing the General Curriculum (NCAC),

To differentiate instruction is to recognize students' varying background knowledge, readiness, language, [culture], preferences in learning and interests; and to react responsively. Differentiated instruction is a process of teaching and learning for students of differing abilities in the same class. The intent of differentiating instruction is to maximize each student's growth and individual success by meeting each student where he or she is and assisting in the learning process. (Hall, Strangman, & Meyer, 2011, Section 2)

In summary, differentiated instruction can be defined as a way for teachers to focus on the student and be responsive to individual differences via a process of adapting and modifying teaching, learning activities, and what students are required to do and produce in a classroom (Universal Design for Learning, 2013).

As these definitions suggest, differentiation of instruction requires attention to the following four design or decision points when planning lessons:

1. Gathering facts about the learners
2. Differentiating content and materials

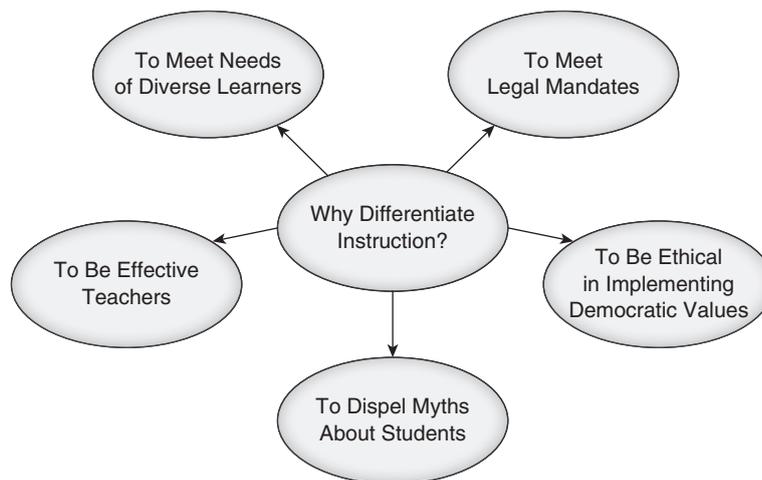
3. Differentiating products and materials
4. Differentiating the processes of learning

Fortunately, through our experiences as teachers, teacher educators, and advocates for personalized and differentiated instruction, we all continue to learn a great deal about differentiating instruction. Over the years, our work with each other (in addition to our work with many other educators) has helped us to integrate principles from both psychology and the curriculum so that teachers can address students' unique needs. While there are many reasons to advocate for differentiating instruction on behalf of K–12 students in all schools, the arguments we outline below focus on giving you information to support your own practice, beliefs, and feelings about the benefits of differentiated instruction.

RATIONALES FOR DIFFERENTIATED INSTRUCTION

We believe there are at least five reasons why differentiated instruction should be implemented *now*. As illustrated in Figure 1.2, differentiated instruction helps teachers (1) to meet the needs of diverse learners, (2) to meet legal mandates, (3) to be ethical in implementing democratic values, (4) to dispel myths that abound in education, and (5) to be more effective in teaching all students. As we explain each rationale below, ask yourself to what extent you agree or disagree with these reasons. You may want to add your own reasons for differentiating instruction.

Figure 1.2 The Multiple Rationales for Differentiated Instruction



Rationale #1: To Meet Needs of Diverse Learners

Do you wonder how to meet the diverse needs of the children who enter your classroom? If so, you are not alone. The demographics of America’s classrooms reflect increasing diversity; moreover, there is an increase of children from ethnic, cultural, racial, and linguistically diverse heritages in classrooms all over the United States. According to the Migration Policy Institute 2010 report, in the 2007 to 2008 academic year there were 49.9 million students enrolled in U.S. public schools (preK to 12th grade) and of this number, 10.7 percent, or more than 5.3 million children, were English language learners.

According to The National Center for Educational Statistics (2013), by the year 2020, immigration, migration, and fertility patterns indicate that about 52 percent of students enrolled in K–12 schools in the United States will be of African American, Asian/Pacific Islander, Hispanic, American Indian/Native Alaskan heritage, or of two or more races. Additionally, consider that the number of children with disabilities from culturally and linguistically diverse families increased from 33 percent in 1992 to 41.3 percent in 2007 (Paige, 2004; U.S. Department of Education, 2008). During the 2009 to 2010 school year, 6.48 million students were served in federally supported programs for students with disabilities (U.S. Department of Education, 2012).

In other words, we can say with confidence that diversity in America’s classrooms is here to stay. Differentiated instruction can help teachers meet the needs of children with diverse characteristics, and technology can assist educators to differentiate (see Table 1.1 for a sampling of web-based assistive technology resources to facilitate access to content, product, and process demands of differentiated lessons).

Table 1.1 A Sampling of Assistive Technology Resources to Facilitate Access to the Content, Product, and Process Demands of a Differentiated Instruction Lesson

<i>Title</i>	<i>Internet Address</i>
AAC Tech Connect (Augmentative Alternative Communication)	www.aactechconnect.com
Tech Matrix	www.techmatrix.org
Infinitec	www.myinfinitec.org
Common Core Application to Students with Disabilities	www.corestandards.org/assets/application-to-students-with-disabilities.pdf

Rationale #2: To Meet Legal Mandates

Do you ponder how to meet all the legal demands of the teaching profession? Legal mandates such as the Individuals with Disabilities Education

Improvement Act (IDEIA, 2004) and the reauthorization of the Elementary and Secondary Education Act (ESEA), commonly referred to as the No Child Left Behind Act (NCLB, 2001), are replete with requirements to differentiate instruction. Both NCLB and IDEIA promote the inclusion of increasing numbers of students with disabilities as full participants in rigorous academic and general education curriculum and assessment. The stated goal of the 2001 ESEA Act is to close the achievement gap with accountability, flexibility, and choice so that no child is left behind.

Similar to those outlined in IDEIA, ESEA's requirements for high standards and student performance are intended to foster conditions that lead to better instruction and learning, equality of opportunity to learn, and excellence in performance for all children. ESEA emphasizes accountability for all students by requiring the disaggregation and review of data for all learners (e.g., students living in poverty, students who are English language learners, students with disabilities).

Additionally, the ESEA requires teachers to meet the standards of certification as highly qualified in every subject area they teach. The result is an increase in the number of students with disabilities studying in co-taught classrooms directed by two types of teachers we define as "Masters of Curriculum" (e.g., classroom teachers) and "Masters of Access" (e.g., special educators, English language learning teachers, teachers of students who are gifted and talented) (Villa, Thousand, & Nevin, 2013).

IDEIA requires that students with disabilities have the opportunity to participate in the same general curriculum taught to all other students in the public educational system. You may ask, "What is meant by the general education curriculum?" The *Federal Register*, a daily journal of the United States government, in their rules and regulations defined it as "curriculum that is used with nondisabled children" (Federal Register, 1999, p. 1470). This translates to the whole educational experience, not just the curricular content! It includes content, process, and products. It means access to everything that students without disabilities already enjoy—information, teaching, and assessment. The U.S. Department of Education Office of Special Education and Rehabilitative Services emphasizes, "Access to the general education curriculum must not be viewed as exclusively a special education concern; all students benefit when the general education curriculum becomes more accessible" (Federal Register, 1999, p. 1470).

In order to differentiate instruction, classroom teachers do not need to engage in co-teaching, but it certainly helps to have a colleague with whom you can collaboratively plan, implement, and evaluate differentiated lessons. The inclusion of students with language and learning differences and their teachers in general education through co-teaching arrangements, combined with the differentiated instruction practices required by ESEA and supported by the early intervention thrust of IDEIA, should actually help teachers in today's standards-based classrooms. All students need their teachers to learn and use the most effective teaching strategies, educational technology and materials, and lesson formats currently recognized. Teachers can accomplish this goal by exchanging such information and expertise through their co-teaching

partnerships. In summary, at the heart of IDEIA and ESEA is the goal of increasing the achievement for all students—students with and without disabilities, students learning English, students who are considered disadvantaged. Accordingly, legal trends reinforce the notion that teachers and other school personnel (e.g., special educators, related services personnel, such as speech and language therapists, teachers of students learning English, gifted and talented education educators, teacher librarians) can no longer be most effective as isolated professionals.

Moreover, nearly all states have adopted the national Common Core State Standards for college and career readiness (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). Parents, teachers, school administrators, and experts from across the country, together with state leaders, led the effort to develop a common core of state standards. Given that many special educators and teachers of students who are English language learners do not have mastery of the grade-level curriculum standards and many general education teachers do not have skills to facilitate learning for diverse learners, a model for collaborative delivery of special education and English language development services (including time and planning with general education teachers to work together to help students meet the Common Core State Standards) is essential. Co-teaching enhances the ability of school personnel to deliver differentiated instruction/intervention in varying levels of intensity in a multi-tiered system of support (MTSS) for all students.

Rationale #3: To Be Ethical In Implementing Democratic Values

Are there moral and ethical arguments to support the use of differentiated instruction? Yes. In fact, differentiated instruction can advance the continued evolution toward democracy in the classroom. Many groups, including women, Native Americans, African Americans, Latino Americans, and people with differing abilities, have struggled to receive an education. As noted by Blankenship and Lilly (1981), “Throughout history, education has been for the elite and educational practices have reflected an elitist orientation” (p. 18).

When teachers differentiate instruction, they are consciously and conscientiously making the content, processes, and outcomes of instruction more accessible to all students—regardless of the students’ race, gender, ethnicity, language, or differing abilities. Through culturally responsive instructional and assessment techniques, teachers can design differentiated instruction lessons that represent the cultural and linguistic strengths of their students and communities (Dill & Boykin, 2005; Duda & Utley, 2006a,b; Webb-Johnson, 2003).

Differentiated instruction can be considered part of a larger reform movement derived from notions of education in a democratic society. According to Apple and Beane (2007) democratic classrooms thrive on

differences in age, culture, gender, and abilities and that when students are separated by labels or stereotype rather than differentiating instruction to accommodate these differences, divisions are created within a learning community that detract from the democratic ethos of that community. U.S. Secretary of Education Arnie Duncan reinforces this notion when recalling, in the following statement, our country's history of struggles to live democratic values.

As the President points out, the story of the civil rights movement was written in our schools because there is no stronger weapon against, and no better path to opportunity, than an education that can unlock a child's God-given potential. Few civil rights are as central to the cause of human freedom as equal educational opportunity. (U.S. Department of Education, 2010)

In the United States, democratic values are embedded in federal legislation, mission statements of school systems, and the often stated goal of helping students to become citizens in a democratic society who can make decisions and effectively engage in multiple adult roles. Teachers who use differentiated instruction can offer students the opportunities to make choices, solve problems among a group, develop consensus, and deal with conflict of ideas. Students with a great variety of differences can have an effective voice. Giving students power and control in the classroom can both prevent problematic behaviors and promote higher levels of learning

Rationale #4: To Dispel Myths About Students

Do you question the truth of several myths that pervade education today?

Although there is ample data to show that children such as those who learn English as a second language, those with disabilities, and those who live in poverty score low on achievement tests compared to their peers, it is not true that these children cannot learn. Teachers (and families) often make assumptions about what students can and cannot achieve based on perceptions and beliefs they have about the labels attributed to them or their perceived abilities and disabilities.

However, these assumptions about students and their potential are often wrong. For example, throughout history we have assumed that several different populations of people who behaved differently were unable to learn, including people with cerebral palsy, people with autism, and the deaf (Crossley, 1997). Historically, educators have also made damaging negative assumptions that subsequently have been proven false about the learning potential of girls, students of color, and students who are learning English as a second language.

Making assumptions about an individual based on a classification (such as language proficiency, social or economic class, race, or ability and disability) is dangerous and can lead to tunnel vision. Specifically, it can

blind others to an individual's strengths and abilities and cause them to see only the person's disability—a phenomenon described as “disability spread” (Van der Klift & Kunc, 2002, p. 26), where people see only the limitations of the student. When students' strengths and abilities are ignored, it is easy to limit expectations or ignore ways in which strengths and abilities can be employed to motivate and support their learning.

Differentiated instruction also helps dispel the myth that English language learners cannot learn. It can dispel the myth that students with disabilities, children of color, and students living in poverty cannot learn. Teachers all across America dispel the myths about these students every time they successfully teach a differentiated instruction lesson. How does differentiated instruction dispel these myths? An example is reported by Pardini in his 2006 article in *Journal of Staff Development*. In the public schools in Saint Paul, Minnesota, where English language teachers and general education teachers co-taught to differentiate instruction at all grade levels over a two-year period, the gap in achievement for English language learners decreased by seven percent in reading and four percent in math. These learners also outscored their peers on the proficiency test called TEAE or the Test of Emerging Academic English measures.

In summary, when teachers differentiate, they help dispel harmful myths; and by using differentiated instruction, they can more quickly assess the impact of the lessons they are teaching. The immediate feedback shows teachers which students need extra help, which ones need more challenging assignments, and those who can move on to the next level of difficulty.

Rationale #5: To Be Effective Teachers

Many people adopt differentiated instruction because of the research evidence that shows positive academic and behavioral outcomes for diverse learners, increased capability to personalize support for students, and the increased effectiveness of instruction. In their in-depth studies of inclusive public schools, Hehir and Katzman (2012) found that an inclusive environment that welcomes and accommodates the learning differences of students raises the achievement level for *all* students and results in more committed and satisfied teachers.

There is an emerging research base that supports Universal Design for Learning (UDL) models and approaches to differentiation (Rao, Wook, & Bryant, 2014) and that reports academic gains related to literacy, math, science, and social skills (Lieber, Horn, Palmer, & Fleming, 2008; Marino, 2009). Further research by Browder, Mims, Spooner, Ahlgrim-Delzell, and Lee (2009) found that three students with severe disabilities increased their independent responses during a UDL-based intervention. In addition, the emerging research base indicates that if teachers use universal design principles to design assessment, they can expect fairer and more accurate results of what their students with disabilities actually know (Dolan, Hall, Banerjee, Chun, & Strangman, 2005; Thurlow, Elliott, & Ysseldyke, 2003).

Co-teaching is one effective way to differentiate instruction. The findings of a metasynthesis of qualitative research on co-teaching conducted by Scruggs, Mastropieri, and McDuffie (2007) revealed that collaboration between general and special educators benefits the quality of instruction and supports for students with and without disabilities. Students with and without disabilities benefitted from adult models of effective collaboration and the students in co-taught classes were perceived to be more cooperative with one another. Students with disabilities were seen as benefitting from increased attention and access to positive peer models in general education co-taught classrooms. Co-teachers themselves identified an exchange of skills resulting in increased competence in their colleague's respective areas of expertise (e.g., content mastery, classroom management, curricular adaptation). When differentiated instruction and co-teaching are combined, the results reflect increased student performance on high stakes assessments. Other researchers have explained the differentiation that can occur within a co-teaching environment for both elementary and secondary students (e.g., Cramer, Nevin, Salazar, & Landa, 2004; Cramer, Nevin, Voigt, & Salazar, 2006; Dieker & Murawski, 2003; Garrigan & Thousand, 2005).

What do many teachers have to say about differentiated instruction? As they explain it, they meet the needs of the diverse learners in their classrooms through "differentiated instruction, breaking the curriculum into smaller chunks, and curriculum mapping" (Cramer & Nevin, 2007).

Teachers describe how they use differentiated instructional processes, such as implementing hands-on activities, cooperative learning groups, peer tutoring, and increased visual aids in the classroom. They also describe using audio texts and English for speakers of other languages (ESOL) and techniques for reading and writing (e.g., sentence strips and word walls).

Differentiated instruction encourages both general and special educators to try new arrangements in the presentation of curricular content. Teachers report that differentiation of instruction creates learning environments that are more fun and motivational for both the students and the teachers. Consider the testimony of high school teachers who reported their experiences in implementing differentiated instruction. One special educator emphasized that students enjoyed having multiple educators in the classroom. "It breaks up the presentation style, and the monotony that can happen when just one educator presents for the entire period." As one general educator reported, instructional responsiveness to the individual learning needs of all students can occur through her "hands-on experiences where students are engaged in helping one another, teaching one another, and sharing their talents." She further commented, "This far surpasses the outcomes when a student is assigned a one-on-one aide." All interviewees said that they experienced an "increased sensitivity to the emotional, academic, and physical needs of the students" and that this led to "increased opportunities for students to succeed" (Villa, Thousand, Nevin, & Liston, 2005).

Elementary teachers who co-teach report similar results. Salazar and Nevin (2005) described the implementation of a co-teaching initiative that resulted in an increase in the percentage of children with disabilities who were effectively educated within their general education classrooms along with children without disabilities. That study reported class-by-class enrollment data and achievement data for the children with disabilities in the co-taught classrooms. Both general and special educators identified the importance of differentiated instruction, as well as training teachers to use this approach, as a major factor for its success.

What happens to children in classrooms where teachers collaborate by using differentiated instruction techniques? In a follow-up to an in-depth case study of one co-teacher team who “looped”—moved to the next grade along with their class—with their third graders when those students were promoted to fourth grade, Cramer, Nevin, Salazar, and Landa (2006) described the effects of teacher collaboration on student achievement.

The scores in reading on the Florida statewide achievement tests, along with feedback from school personnel, indicated that students with disabilities as well as their peers showed strong gains in reading and social skills.

As one of the teachers explained, “We share responsibility for differentiating instruction.” The classroom teacher elaborated, “It’s beneficial [co-teaching] to the students. It’s not always easy to work with another adult, but because it is so powerful for the students, I think it’s worthwhile whatever inconvenience it might be for the teachers” (Cramer, Nevin, Salazar, & Landa, 2006).

Similarly, co-teachers using differentiated instruction in a California school reported academic gains in literacy for students both with and without disabilities. Garrigan and Thousand (2005) worked with a computer assisted instructional program that was developed using principles designed to meet the needs of advanced learners, challenged learners, and English language learners. The differentiated instruction arranged by the co-teachers made it possible for students with and without disabilities to improve: “. . . the literacy performance of the four students with identified disabilities increased dramatically over the five months of the co-teaching intervention. . . Pre-post intervention gains exceeded what might be expected, given their low starting performances” (Garrigan & Thousand, 2005, p. 59).

What happens to students who are gifted and talented when their teachers use differentiated instruction? Tomlinson encourages teachers to think of differentiated instruction as a way to create “classroom escalators” that take students to higher and higher levels rather than as “stairwells” that take students to a certain grade-level landing where they stop (cited in Hess, 1999, p. 24). In differentiated instruction, teachers provide multiple avenues to learning so that the classroom is a good fit for varied learners—including those who are advanced (Gregory & Chapman, 2007; Tomlinson, 1995, 1999). Reporting a 2005 study, Rock, Gregg, Ellis, and Gale (2008) determined that students who received differentiated intervention in math experienced significantly higher scores on posttests than their peers who did not receive differentiated instruction.

RETROFIT AND UNIVERSAL DESIGN: TWO APPROACHES TO DIFFERENTIATED INSTRUCTION

How do teachers implement differentiated instruction?

At the beginning of this chapter, we discussed what differentiated instruction is *not*. To emphasize this point, remember that a curriculum is not differentiated when assignments are the same for all learners. Nor does it involve adjustments that consist of varying the level of difficulty of questions for certain students, grading some students harder than others, or letting students who finish early play games for enrichment.

Instead, we have emphasized that differentiated instruction is a process where educators *vary* the learning activities, content demands, modes of assessment, and the classroom environment to meet the needs and support the growth of each child. With differentiated instruction, teachers plan different learning experiences in response to each student's needs. They develop learning goals, define curricular content, structure learning activities, and conduct varied assessments that allow students to choose how to achieve the goals. Using differentiated instruction enables teachers to develop methods of teaching and learning for students of differing abilities within the same class. Teachers can maximize their students' growth and individual success by teaching each student at his or her skill level, *and* therefore allow them to assist in the learning process. Teachers mesh their skills and knowledge about their curriculum with the training, skills, and knowledge that special educators have learned in individualizing instruction by suggesting and teaching their partner teachers to use accommodations and adaptations.

Other school personnel can add their specialized knowledge and skills to the development of differentiated instruction lessons: teachers whose students speak languages other than English, reading teachers, speech and language therapists, literacy and math coaches, teacher librarians, school psychologists, gifted and talented teachers, teachers in schools with high populations of economically disadvantaged students, guidance counselors, and so on.

As shown in Table 1.2, teachers can differentiate instruction using two major approaches: (1) *retrofitting*, or (2) *universal design for learning*.

We recognize that everyone might not agree with the inclusion of a retrofitting process in a discussion of differentiation of instruction because it is a reactive rather than a proactive approach. Retrofitting is what happens when we realize that a process is not working and so decide to remodel and reconceptualize or redesign the content, process, and product demands rather than gather facts about our students from the inception (e.g., think of older buildings that are retrofitted with ramps to make them accessible for people in wheelchairs).

Retrofitting the preexisting curriculum and methods is what most teachers try to do to meet the needs of their students with disabilities.

Table 1.2 Two Approaches to Differentiated Instruction

<i>Reactive Retrofit</i>	<i>Proactive Universal Design for Learning</i>
Content and Material Demands	Gather Facts About the Learners
Process Demands	<i>Design learning environments accessible to all by applying UDL principles to differentiate</i>
Product and Assessment Demands	Content and Material Demands
Facts About the Learner(s)	Product and Assessment Demands
<i>Discover mismatches and use differentiated instruction to address any mismatches between facts about the learners and the content, process, and product demands of the classroom</i>	Process Demands

However, retrofitting the curriculum is an attempt to find a solution *after* the fact in order to fit the student into an existing program. We acknowledge that the readers of this book may be in different stages in terms of creating differentiated classrooms. For those of you who are just beginning to think about differentiation, retrofitting provides a process and a place to begin. Additionally, understanding the retrofit approach for differentiation is beneficial if and when teachers realize that their universally designed lesson is not working for some students. We celebrate your decision to employ a retrofit approach rather than sending students away to other environments. (Chapter 2 illustrates the use of a retrofit approach in elementary, middle, and secondary school classrooms.)

In contrast to the retrofit approach, the *universal design for learning* (UDL) approach is an educational application of universal design principles developed and used by architects, product designers, engineers, and environmental design researchers to make products, communications, and the physical environment usable to as many people as possible at little or no extra cost. The Center for Applied Special Technology (CAST) (2008) describes universal design as “[t]he design of products and environments to be used by all people, to the greatest extent possible, without the need for adaptation or specialized design.” In educational environments, UDL refers to the creation of learning experiences that minimize the need for modifications for particular circumstances or individuals (Meyer & Rose, 2002; Udvari-Solner, 1996; Universal Design for Learning, 2013). UDL involves constructing curriculum, instruction, and assessments that anticipate the preferences and needs of learners. Because of the unique levels of readiness, differing interests, and varying learning styles of the students who enter our classrooms every day, Tomlinson (1999) encourages the use of instruction by design. She applies this recommendation to curriculum development, instructional delivery, and assessment in order to facilitate meaningful and effective differentiated instruction not only for students

perceived as disabled, at risk, or gifted, but also for “allegedly average” students. In this way, a universal design approach to differentiated instruction can be seen to extend the promise of individualized personalized goals for instruction to all students.

According to Hall and Mengel (2002) teachers who use differentiated instruction recognize and react *responsively* to their students’ varying background knowledge, readiness levels, language skills, [culture], preferences in learning, and interests. Using the UDL approach creates and designs products and environments so that they can be used *without* modifications. In Chapters 3 through 7 of this book, we take you through a step-by-step process developed by the Center for Applied Special Technology (CAST, 2005; 2008) and elaborated by Udvari-Solner (1996) at the University of Wisconsin for teacher educators. This process helps you apply UDL principles so that your students can thrive on multiple means of *representation*, multiple means of *engagement*, and multiple means of *expression*. To initiate a universal design approach, educators first *gather facts* about their learners and then think about three distinct curriculum access points—content, process, and product (Tomlinson, 1999).

The *content* access design point concerns what is taught and what we want students to learn, know, and do. Educators must keep the Career and College Readiness State Standards front and center as they consider how to facilitate access at the curriculum content design point. A key aspect of content is determining the appropriate entry point for various learners into the content. Here, educators may consider how to integrate curriculum across the disciplines, or how to include the teaching of responsibility, peacemaking, and self-determination as part of the curriculum. The content design point is multidimensional because it includes what is to be taught, what level of knowledge or proficiency students need to demonstrate, and which materials are to be used.

The *product* access design point concerns how students demonstrate what is learned and how their products are assessed. At this point, instructors may consider how student learning preferences can be used by students to show what they have learned and how to augment standardized assessment with authentic assessment approaches.

The *process* access design point concerns how students make sense of what they are learning. Various lesson formats and arrangements as well as scaffolded supports and/or research-based instructional practices are selected to provide access for everyone. Here, teachers may consider how technology and peer-mediated instructional approaches also can be incorporated into instruction.

Table 1.2 summarizes the differences and similarities between the retrofit and the UDL approaches. The basic and most salient difference is that the retrofit process begins only after the lesson plans have been completed, the lesson is underway, and both students and teachers view the instruction as unsuccessful.

In contrast, the UDL approach starts with facts about the learners and designs content, product, and process to match the learners’ characteristics,

thus decreasing the need for retrofitting. This can be done at any time during the school year. Typically, the level of planning is more intensive at the beginning when teachers are “getting to know” their students. However, with increased mobility of the student population, teachers can expect to handle “new students” at any time during the year—thus requiring a continuous updating of the fact process.

When teachers use UDL to differentiate instruction, they are assured that their curriculum is designed to facilitate access for all students in their diverse classrooms. The curriculum incorporates a built-in means for the teacher to present the subject matter so that each student has meaningful access to it using his or her abilities and strengths—without first having to overcome the usual physical, affective, or cognitive barriers, or without having to be stigmatized by, or isolated from, the other students.

With UDL, teachers are assured that even those students who have physical, sensory, or cognitive disabilities are able to learn some or all of the same lessons as the other students. From the teacher’s point of view, having materials with built-in accommodations saves time and energy. When adaptations or accommodations are not provided to teachers, they must resort to retrofitting either by creating all the accommodations themselves—an unrealistic expectation—or by experiencing more difficulty in teaching their students.

SYSTEMIC SUPPORT FOR DIFFERENTIATED INSTRUCTION

Administrative leadership and support is foundational to achieving the beneficial outcomes of differentiated instruction. Beneficial outcomes increase when a school principal, assistant principal, or instructional coach works with the faculty to provide systematic professional development; when coaching and mentorship opportunities are established for learning retrofit and universal design for learning approaches to differentiation; and when master schedules are arranged so that teachers and other school personnel can collaborate in planning and teaching. To assist in coaching and mentoring, the introduction to the case study section of this book provides a protocol for observing and coaching educators as they differentiate instruction. As you read the case studies presented in Chapter 10 through Chapter 15, how can you use the protocol? Can you detect the professional development provided to the educators who design the universal lesson plans featured in those chapters?

School principals, district office personnel, grade-level team leaders, special education directors, department chairs, and teacher leaders succeed in facilitating change to increase teacher capacity to differentiate instruction when they work to

1. build a vision for collaboratively planning and problem solving for differentiating instruction;

2. assist school personnel to see how differentiated instruction relates to and supports other best practice initiatives, such as implementation of the Common Core Career and College Readiness Standards, inclusive education, co-teaching, Response to Intervention and Multi-Tiered Systems of Support, and collaborative planning and problem solving (Villa & Thousand, 2011);
3. develop educators’ skills and confidence to differentiate instruction;
4. create meaningful incentives to encourage educators to learn and implement new approaches for meeting the needs of all learners;
5. reorganize, schedule, and expand human resources; and
6. develop an action plan with specific activities and sequences of steps put in place to ensure vision, skills, incentives, and resources.

Table 1.3 offers a sample of additional administrative actions to promote differentiation of instruction.

Table 1.3 Administrative Actions to Promote Differentiation of Instruction

Publicly articulate the rationale for differentiation of instruction.
Redefine staff roles (i.e., in the job description of classroom teachers and support personnel) so that all are expected to participate in collaborative planning and differentiation of instruction.
Create a master schedule that allows for collaboration (e.g., common planning and lunch periods).
Establish professional support groups to help staff learn approaches for differentiation of instruction.
Institute professional development to create common conceptual frameworks, skills, and dispositions. Provide training in collaborative planning, creative problem solving and differentiation via courses and workshops, mentoring and peer coaching systems, job shadowing, clinical supervision, and/or the pairing of teachers just embarking on their differentiation journey with veteran teachers who excel in this practice.
Educate the school and community about the accomplishments of teachers who are using retrofit and Universal Design for Learning approaches to differentiating instruction.
Provide incentives for differentiation (e.g., recognize accomplishments, offer additional training, provide release time to observe one another’s differentiated instruction, attend conferences, and make presentations featuring differentiated instruction strategies and processes).

OVERVIEW OF THE BOOK

The remaining chapters in this book lead you through the process of how to differentiate instruction. Chapter 2 follows the school lives of several students whose teachers use the retrofit approach. Chapter 3 discusses the UDL approach as well as a lesson plan format helpful in designing, implementing, and evaluating differentiated instruction lessons.

Chapter 4 guides you as you gather facts about the learners you teach. Chapter 5 shows you how to differentiate access to the content of learning. Chapter 6 focuses on differentiating the *products* (or outcomes) of learning or how the students show what they know. Chapter 7 provides an array of effective methods used to differentiate the process of learning.

In Chapter 8, we emphasize the importance of collaborative planning and evaluation, while in Chapter 9 we discuss collaborative teaching to accomplish differentiation of instruction using the UDL approach.

Chapters 10 through 13 offer lessons that employ the UDL approach for the teacher teams and students introduced in Chapter 2: Elementary social studies for Kevin (Chapter 10); middle school mathematics for Rosa (Chapter 11); middle school science for Tina (Chapter 12); and high school language arts for Chang (Chapter 13). Chapter 14 features an instructional team that begins their journey in differentiated instruction by developing an Algebra II unit through the UDL lens, carefully assuming and anticipating the diverse backgrounds, skills, and conceptual understandings, interests, and learning preferences of their targeted learners.

Chapter 15 summarizes our basic assumptions and offers advice for sustaining the work involved in differentiating instruction. We hope that as a result of reading this book and working in collaboration with others, both retrofitting and the UDL processes help make differentiated instruction more manageable for both teachers and administrators.

Throughout the book, we employ tables and charts as one method to explain differentiated instruction. The tables and charts are used to provide visual referents for the text information—an accommodation to assist in comprehension.

Textual scaffolding is incorporated in the organization of the text and includes features like content webs for each chapter, headings, introductions, summaries, and tables. We hope the text scaffolding techniques help make the selections more reader-friendly (Van Den Broek & Kremer, 2000) in addition to providing a model of how teachers can use text scaffolding for their own learners.

At the end of this book and as you complete your journey toward differentiating instruction, we are confident that you are now better prepared to address the instructional needs of today's diverse array of learners. In this way, all of us can agree with Alvin Toffler's remark that introduced this chapter: "Learning is the process of preparing to deal with new situations."