

CHAPTER ONE

START UP

WHY KNOWING AND ADDRESSING STUDENTS' LEARNING DIFFERENCES IS CRITICAL

I always hear from teachers that differentiation seems too hard because they don't even know where to start. This chapter will focus on the fundamentals to get you going with differentiation. In this chapter, you will find:

Introduction
What Differentiation
Is and Is Not
A Glance at a Differentiated
Classroom

Frequently Asked Questions
Keepsakes and Plans

INTRODUCTION

Welcome to school! There is something so very exciting about a new class of students, a new year of potential, and the fulfillment of touching the future. As teachers, we love getting to know our students. We love thinking about how much they will grow this year. We are excited to share activities that we love to do, and we hope our students will not only love to do them too but more importantly also will learn from them.

And very quickly, as we get to know our students, we recognize who each student is as an individual human being and as an individual learner. We come to understand that Maddi already knows much of what is in our grade-level content and that what she doesn't already know, she will learn in less than half the time it takes the rest of the class. There is outgoing Elena who prefers to learn with others, asks for help freely, and offers help equally as freely. Judah is a constant bundle of energy and desires to follow directions, even if he usually forgets what the directions were. There is Izzi who prefers to draw and think in color and pictures, and there is Landon who is shyly constant in his learning. There is also Alexia who reads voraciously and above grade level, but she is less inclined to enjoy mathematics. Sophia is extremely shy, bright, and capable but doesn't want to show it and does not like to do anything in front of the class. And then there is Justin, who you didn't even realize was a special education student with an Individualized Education Plan (IEP) until the IEP showed up in your mailbox. Aamino just moved to this country from Somalia and hasn't been in a formal school before, and he does not speak English. Nick is very bright but is slowly losing interest in school because he is tired from taking care of his little brother and sister after school, even though he really needs to be taken care of himself. And that is just a few of the students in your class. When we consider all of the students, and the overwhelming amount there is to learn this year, we don't lose our love for students and enthusiasm, but we begin to wonder just how to pull all of this off!

Let's face it. We didn't go into teaching for the prestige or money. We care about students. We care about the quiet and shy, the rowdy and rambunctious, the leaders and followers, the musicians, artists, athletes, cheerleaders, scholars, strugglers, and everyone in between. And in most classrooms, I have just described your student population! Our kids come to us from a

wide range of backgrounds and families, experiences, and mastery levels. And we need to reach and teach them all: to have high expectations for each student and help each one fulfill his or her potential and beyond. And that is where differentiation comes in.

WATCH IT!

As you watch Video 1.1, *Getting Started With Differentiation*, consider the following questions:

1. How is differentiation not considered individualization, yet still about the individual?
2. What descriptions confirm your understanding of what differentiation is and is not?
3. What is new or surprises you in the descriptions?
4. Why a three-legged stool? Why balance the three “legs” of differentiation?



Video 1.1 Getting Started With Differentiation

WHAT DIFFERENTIATION IS AND IS NOT

If you ask a group of educators what is differentiation, you will undoubtedly hear it is about helping every student succeed to the best of his or her ability. That is true. Nevertheless, if you dig deeper for details, explanations can vary drastically and have changed in emphasis over the years. I have heard everything from “it’s just the old individualized instruction back again with a new name.” Or, “this is just about multiple intelligences,” or even, “all you have to do is give choices.” Today, largely because of a common description of Tier 1 of the Response to Intervention (RTI) as quality core instruction for all students that is differentiated, most educators equate differentiation with interventions for struggling learners. Just like the story of the blind men describing an elephant based on the part of the elephant they can feel, all of these explanations give a small sliver of the bigger picture of differentiation. Far too often a person’s sliver of differentiation is taken as the whole and applied in ways that are neither appropriate nor purposeful, and the conclusion is that differentiation just does not work.

According to Carol Ann Tomlinson (2014, p. 4), “Teachers in differentiated classrooms begin with a clear and solid sense of what constitutes powerful curriculum and engaging instruction. Then they ask what it will take to modify that curriculum and instruction so that each learner comes away with knowledge, understanding, and skills necessary to take on the next important phase of learning.” In essence, differentiation is a teacher’s decisions about instructional and assessment design to best equip his or her students for learning.

Sounds simple, and in some ways, it is. In some ways, though, it absolutely is not! The decisions teachers make need to be based on the foundation of explicitly clear standards and learning goals, knowledge of their students as learners, effective pedagogical strategies and task choices, and assessment data. When thinking about students as learners, there are three areas as defined by Tomlinson (2001) that provide a structure for decision-making: Readiness, Interest, and Learning Profile. These three characteristics of learners will be the basis on which we discuss and develop how we can embrace and address the differences in our learners. What follows is a brief introduction to each characteristic that will be developed in detail with lesson examples in the following chapters.

READINESS

“This is easy.” “This is too hard. I can’t do this.” Neither of these reactions from students is what we want to hear. If those are honest reactions from the students, then we have not addressed their readiness. In some ways, readiness differentiation is like the Three Little Bears of Education: We want “just right.” The problem is that it is usually impossible to find just one “just right” for an entire class (Hattie, 2013).

Readiness differentiation begins with determining the entry point for each student on the learning trajectory for the activity, lesson, or unit. We tend to link readiness with “ability grouping.” Yet there are significant differences in what we commonly think of with readiness grouping and ability grouping, no matter how flexible the ability grouping may be designed to be. Many areas impact readiness, including but not limited to life experiences, prior knowledge, ability to abstract and generalize, and home support.

We have all experienced the wide range of learners in our classrooms that can be based on a wide variety of factors. Certainly, a student's prior knowledge plays a major role in whether the student is perceived as advanced, typical, or struggling. Additionally, there are factors that have equally (or perhaps have greater) impact on a student's alacrity with learning mathematics, such as the speed at which students process and learn new information, the help and attitudes about education students experience at home, and past experiences in school. Add to this those students who are from other countries, learning English as a second language, or are identified as gifted or with a form of learning disability, and the range of learners can seem overwhelming. To teach all students with the same strategies, at the same pace, with the same expectations does not make sense. This is the essence of readiness differentiation.

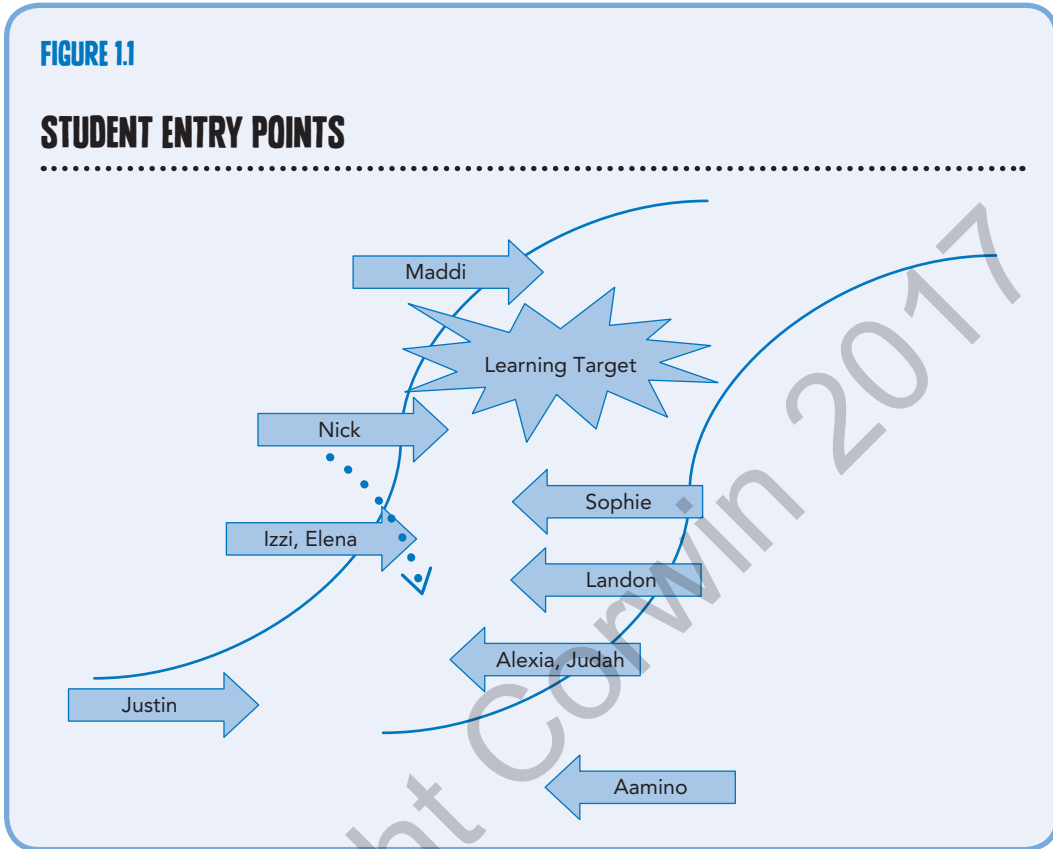
Please notice that readiness does not imply ability! In fact, we now know without a doubt that ability is based on effort and is not a fixed commodity. According to Carol Dweck (n.d., 2006), "No matter what your current ability is, effort is what ignites that ability and turns it into accomplishment."

Readiness addresses that range of challenge where learning can happen for the student, being neither too easy nor too hard. One problem with considering readiness is that when looking at the student's actions, it is easy to associate readiness with what students can and can't do . . . *especially* with what they can't do.

I remember reading an article several years ago about the new superintendent my district had just hired. In it she stated that we would be committed to finding all of the holes and gaps our students had and to filling them. At first this might sound noble and like an appropriate endeavor. But think about it. The implication is that our education was to work from a deficit model—find what is wrong and fix it! Working from this negative frame of mind leaks out in our attitudes and speech too often, leaving students to feel unsuccessful, unable to learn, and at worst, dumb.

Readiness, on the other hand, works from a position of strength on the part of the student. What is it the student does know and is able to do? This provides the entry point into the learning. When we consider the "next step" in the learning progression for a student, we are addressing readiness. Readiness differentiation offers all students an appropriate challenge, a taste of success with effort, and a developing sense of efficacy and pride in learning.

Figure 1.1 illustrates readiness differentiation as determining entry points on the learning path.



TRY IT! READINESS IMPRESSIONS

Purpose: To begin thinking about the differing readiness levels of your students

As you have gotten to know your math students, you have somewhat of an instinct as to their readiness levels. At what readiness levels would you put each of your students for mathematics, recognizing that this is a general statement and that readiness certainly changes?

1. Make a list of readiness groupings for your classroom. Next to each student's name, explain why you placed that student

in that group, for example, acquires new skills and concepts quickly or still struggles with basic facts, etc.

This initial list is based on your current knowledge of your students. Detailed information on determining readiness is provided in Chapters 2 and 7, and further examples of designing for readiness are provided in Chapter 4.

INTEREST

We all know the power of interest—when kids are really excited and hooked on what they are doing. The adage about time flying when you are having fun is never more true than when students are involved in learning and doing something they enjoy.

When I first considered differentiating by interest, I was largely stuck. For the most part, my students did not have hobbies and extracurricular activities that were mathematics related. There are only so many shopping problems you can use . . . and the boys didn't really care about shopping. Trying to print mathematical problems on their favorite color of paper wasn't exactly doing it either! What a misunderstanding I had about differentiating by interest.

It is incredibly powerful when we can link our content learning to students' hobbies and passions. It is equally important to ignite new interests through our own modeling of interest and passion for our subject. Interest differentiation is about igniting intrinsic motivation for learning. Eric Jensen (1998) gives three criteria for increasing intrinsic motivation, which fits perfectly with interest differentiation: (1) providing choices, (2) making content relevant to the learner, and (3) using engaging and energetic learning activities. Figure 1.2 models Jensen's lesson factors that contrast increasing students' motivation versus apathy.

How we figure out our students' interests is very easy—talk to them. Ask them. Our beginning of the year surveys are usually filled with interest items. We find out their hobbies, extracurricular activities, favorite movies and books, as well as hopes and dreams! We can also find out their favorite ways to learn mathematics, such as hands-on activities, and why those learning activities work for them. When we can make connections among personal interests, learning interests, and content, we have them hooked! All of these pieces of information begin to build a bank of interest differentiation possibilities.

FIGURE 1.2

MOTIVATION VERSUS APATHY LESSON FACTORS

Classroom Factors	Classroom Factors
Choices – access to content, process, product, grouping, resources, and environment	Required – no student voice, specific task or assignment for all
Relevance – what is being learned is meaningful in the eyes of the learner and connected to the learner’s experiences. Content is developed at a conceptual and, applicable level	Irrelevant – content appears out of context and disconnected from student and is often learned only to pass a test
Engaging – emotional, energetic hands-on, and provides for learner’s input	Passive – learning activities have low interaction such as seatwork and note-taking
Results In	
Increased intrinsic motivation	Increased apathy and resentment

TRY IT! THEY CARE ABOUT ...

Purpose: To identify students’ interests

1. What do you know already about your students’ interests? Create an Interest List that includes general interests of students in your grade level, strategies and activities that have worked well for your class, and individual interests of your students of which you are aware.

Strategies for assessing your students’ interests are given in Chapter 2.

LEARNING PROFILE

Perhaps the most debated and questioned feature of student differences is learning profile. In general, learning profile refers to the way brains best receive information, make sense of information, commit information to memory, and recall information from memory. I imagine that all of us have learning stories that exemplify when a lesson completely connected with us, and when one completely did not. Sometimes it is a connection with the teacher. Sometimes it is the type of task that really works. This could be a hint as to your preferences in learning. I know that I struggled with teachers who primarily lectured. I still do not like listening to audio books and can get bored with long phone calls. I need visuals. When sitting in a lecture, I take extensive notes to make the talk visible. How about you? What ways do you feel you learn best?

There are many different structures by which we can consider learning profile. Notice that the term is learning *profile*, which is an all-encompassing term for many different ways of learning. Often people use the term “learning style” in place of “learning profile.” Nevertheless, learning style has so many different meanings that I always ask someone to clarify what he or she means when using that term.

Different authors and researchers have different opinions about learning profiles—whether we are born wired in certain ways, whether these paths change over time, and whether they vary subject to subject. For our purposes, we will have a more general conversation about learning profile and how we can use it to structure differentiated tasks.

Learning profile includes four broad categories: Group Orientation, Cognitive Style, Learning Environment, and Intelligence Preference (Tomlinson, 2001). Figure 1.3 elaborates on each of these areas.

Certainly some other factors can play into learning profile—there is plenty of research indicating learning differences between the genders as well as cultural influences. Although the learning profile structures are generalizable, none is true for every student. It is part of our job to be a student of our students—to determine what each student’s combination of preferences will be as

FIGURE 1.3

CATEGORIES OF LEARNING PROFILE

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Group Orientation	How do students prefer to work? Alone or with a partner? Who likes to figure things out first, and then share? Who likes to work through an activity with someone else? Which of your students work to please themselves, others, or the adults in their lives?
Cognitive Style	Which of your students need to see the big picture before they can make sense of the details, or do they need details to build to a big picture (whole-to-part or part-to-whole)? Who thinks very linearly, and who is more global and nonlinear? Which students work better with collaboration, and which work better with competition? Who are more reflective, and who are more action-oriented?
Learning Environment	Who needs a quiet and calm atmosphere to concentrate, and who can concentrate in noise and activity? How does temperature and light (bright or dim, natural or fluorescent) impact the learning of different students? How are desks arranged? What about music playing?
Intelligence Preference	Students will come with different learning intelligence preferences such as the theory of Multiple Intelligences (Gardner) and Triarchic Theory (Sternberg), which include analytical, practical, and/or creative orientations to learning.

we teach mathematics. When determining learning profiles for your students, please be aware of two very important warnings:

Consider It!

Think about your learning profile. What are your natural tendencies for preferred learning activities and instruction? How does this influence your lesson design? Who in your class learns in the same way? Who does not? Do you know how they might learn? Chapter 2 will explain how to recognize your students' learning profiles.

- It is possible that some students learn in the same ways that you do. You can also count on the fact that other students will not learn in the same way. Yet, it is completely natural for us to teach in the ways we best learn. That will always be our most natural fallback option. Thus, it is important to be aware of and plan for the wide variety of learning profiles in your classroom.
- We need to be careful not to try to determine “what kind of learners” students are and then assign them to tasks by what we assume is the student’s “type.” It is possible to use discussions about learning profile to help students understand differences in how people learn, and their likely strengths and weaknesses as discussed in Chapter 2. Nevertheless, in differentiating by learning profile, it is best to offer varied learning profile approaches to exploring and expressing learning, with the students making the choice of the specific task.

THREE CHARACTERISTICS OF DIFFERENCE

A friend and colleague, Cindy Strickland, uses an image of a three-legged stool to illustrate differentiation, with each leg labeled with one of the learning aspects of students. Figure 1.4 provides an illustration of the balance of the “differentiation legs.”

Have you ever sat on a three-legged stool with uneven legs? I have. I can do it for a little while, but soon I am looking for a different place to sit. It wobbles and is uncomfortable. Worse would be sitting on a three-legged stool with only two legs, or what about one leg? That is a pogo stick, not a stool. This should be the picture of respectful differentiation: Decisions about differentiation need to be in balance according to students’ learning needs. Just like a stool out of balance, differentiation out of balance may cause unanticipated problems.

- When we differentiate only by **readiness**, we tend to track our classrooms without meaning to. Students begin to feel that they are always working with the same other students and can classify themselves as a “bluebird” or “buzzard.”
- When we differentiate only by **interest**, we can give the impression that learning for learning’s sake is never necessary, and that if a student isn’t really interested, the learning can be skipped.

FIGURE 1.4

DIFFERENTIATION LEGS

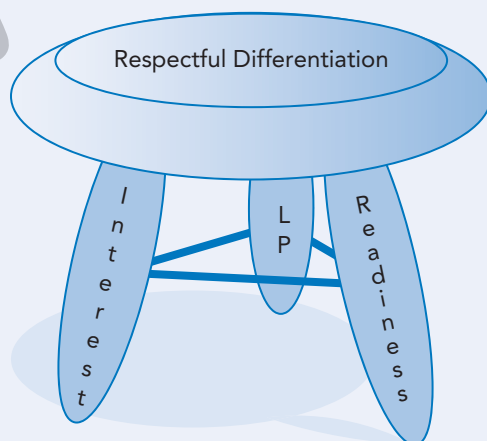


Image © Clipart.com

Consider It!

As you think about your natural differentiation in class, to which of the differentiation “legs” do you most naturally lean? Is there a “leg” that you do not address often or with which you feel uncomfortable?

- When we only differentiate by **learning profile**, we can create learning cripples that are not flexible in their approaches to learning and not able to learn from a wide variety of teachers and opportunities. The three-legged stool is the perfect balance when we consider the whole of differentiation.

DIFFERENTIATION IS AND ISN'T . . .

It is interesting that of all the content areas taught in school, the way mathematics is taught is generally the most consistent of any subject across the country. It is as if there is an unspoken version of a mathematics lesson that is implemented in most classes and most grade levels, regardless of how much creative license teachers employ in other subjects. We tend to model a problem type, practice the problem type, possibly problem solve around the problem type, have homework on the problem type, and tomorrow repeat with a new problem type! And yet, we know that we are not successful overall in mathematics. There are many factors to consider when we design lessons to increase understanding in mathematics. The first factor in the process is analyzing our standards and explicitly stating the factual, skill, and conceptual expectations. This is developed in Chapter 3. We use the explication of our standards combined with the knowledge of our students, as described in Chapter 2, to develop learning goals, instruction, and design or choose tasks. Designing instruction and tasks geared to individual student’s learning needs through differentiation will reach and engage students in ways that nothing else can. Chapter 4 brings all of these ideas together.

As we move forward in designing and implementing differentiation in mathematics class, let’s take a final general look at what differentiation is and isn’t in Figure 1.5.

A GLANCE AT A DIFFERENTIATED CLASSROOM

PRIMARY CLASSROOM

“Everyone get your math paper out. I’m going to go over the correct answers. Correct any of the answers you may have missed. Next we will use ten-frames to make tens. Now we will draw ten-frames. And then we will begin homework.”

FIGURE 1.5

DIFFERENTIATION IS AND ISN'T

Differentiation Isn't	Differentiation Is
A way to make struggling students pass the test	A way to address all students and all ranges of readiness. Readiness differentiation is 1/3 of the total picture of differentiation, and it is not limited to struggling students.
Fluffy	A way for individual sense-making and connections by providing multiple methods for learning and demonstration of learning. It focuses on providing access to deep and rich content founded on standards.
The individualized instruction from the 70's	A way to address individual students and how they learn, but it does not endorse individual lessons for each student. Rather, it considers which groups of students will most benefit from which methods and tasks.
All about multiple intelligences	Inclusive of multiple intelligences, but a learning profile is 1/3 of the total picture of differentiation and multiple intelligences is one of many ways to address learning profiles. This is a small slice of the total picture of differentiation.
Just about giving choices to cover your bases	Inclusive of giving choices to increase motivation, but the design of the choices offered is significant. Again, interest differentiation is 1/3 of the total picture of differentiation.
Instinctive	Not instinctive. Our instinct is to teach the way we learn or the way we were taught. Differentiation is based on assessment data and understanding our content as well as our students.
Untenable and not worth a teacher's time	Possible. No one differentiates every lesson every day. Choosing when and what to differentiate is part of a teacher's decision-making process. Designing effective differentiation does take time and planning, especially at first. It gets easier over time and is worth it when you see students engaged and excited to learn.

It is a condensed description of most primary mathematics class sessions. Certainly differentiating in the primary classroom has certain challenges because the students are not as capably independent as older students. Yet, it is possible to differentiate and use stations or rotations with the youngest students.

“Let’s all practice adding numbers by making a ten. We will use ten-frames to help us. Why would it be helpful to be able to make a ten?” The whole class lesson is using two ten-frames to add two single-digit numbers by making a ten. The students quickly realize how much easier it is to add a single digit and ten, rather than two single digits. There is now motivation to make a ten so that the addition facts become much easier.

After students practice using the ten-frames to add single-digit numbers as a whole class and individually, the teacher divides them into readiness rotation groups based on prior knowledge of students and current observation from the guided practice. Stations are set up for two different rotations based on two activities with which the students have had experience as well as their current learning. Students needing more reinforcement follow the blue rotation, and the students further along follow the orange stations as shown in Figure 1.6.

To conclude the lesson, all students come back together to discuss the strategy of “making a ten” to add numbers. Students explain why or why not it is a good strategy, and when it is easier to use or not to use. They compare the strategy with other strategies they know such as “counting on.” The teacher asks students to

FIGURE 1.6

COLOR-CODED READINESS STATIONS

Blue Rotations	Orange Rotations
Roll two dice and write the corresponding addition problem and sum (students can count the pips if needed)	Play addition war
Play addition war by turning over two playing cards (with face cards removed) and adding the two cards	Use two and three ten-frames to add either two one-digit numbers or a two-digit and a one-digit number (addends are on cards that are flipped over to form the problems)
Use ten-frames to add single-digit numbers and color a ten-frame sheet to show their work	Use notation to “make a ten” for single-digit addition problems
Meet with the teacher	Meet with the teacher

complete one of two problems (blue or orange) of adding two single-digit numbers using a ten-frame picture, or a two-digit and one-digit number using a ten-frame picture.

WATCH IT!

As you watch Video 1.2, *Balanced Differentiation in the Classroom*, consider the following questions:

1. In what way does Mrs. Everson address different aspects of differentiation through her stations?
2. How does the specific design of the stations address both the readiness and the interest of the students? How do her supplies provide learning profile access?
3. How does the teacher manage different tasks occurring at the same time? (Note: No independent station was brand new for students although some might have had slight adaptations from a previous class.)



Video 1.2 *Balanced Differentiation in the Classroom*

INTERMEDIATE CLASSROOM

“There is a warm up on the board. After you complete it, please take out your homework and check your answers against the correct answers that I posted. What questions do you have?” You know how most mathematics classes run: Review homework, new notes, or learning; have some kind of practice; and start homework problems to be sure the students can finish the work at home. Often students fill in blanks in a workbook or practice with worksheets. Although there is nothing inherently wrong with any of these pieces, a steady diet of this type of learning is surely uninspiring at best and demotivating and disconnected at worst. Teachers who are responsive and creative in designing literacy lessons are sometimes at a loss as to what a differentiated mathematics class could look like.

“On the board you will find a choice of warm up problems. Please choose the one that you feel is just right for you—not too hard or too easy. Once you have completed your problem, please find a partner with whom to compare your homework

Consider It!

- What learning environment attitudes need to be in place for differentiation to be viable and for young students to work together?
- When should station work be introduced with young students?
- What activities, games, or structures do you repeat often that can become an independent station?
- Make a list of activities, games, or structures that can become stations.

answers based on the homework assignment you did last night: red, purple, or green. Do not only compare your answers, but also compare the method you used to solve it. If you have different answers, try to convince each other of your work. You can also check with someone else who did the same assignment. Only ask for help if you cannot figure it out. You have ten minutes.”

Students compare their homework problems that were based on readiness. All problems were on the current topic of decimal operations; yet, problems were tiered based on applications problems, representations, and whether examples and/or reminders were provided. All assignments had three common problems, which would be the basis for whole class discussion after the independent review.

When the homework conversations are finished, the teacher asks students to meet in groups of three or four to work on an investigation relating to decimal place value, whole number place value, division, and fractions. All groups complete the same investigation; nevertheless, some groups are given base-ten blocks (with a flat representing one whole) as a concrete representation to work through the relationships, whereas other groups have a more scaffolded version of the investigation with models and hints embedded. The teacher circulates among the groups to ask questions to help students extend their thinking or help focus thinking.

As students complete the investigation, the teacher pulls the class together to discuss the findings and make the connections and understandings among place value, division, and fractions explicit. Several problems are then practiced. The class concludes with a synthesizing activity in which students can choose between working a specific problem with mathematical explanations, writing a letter to a friend explaining connections and what a problem will look like, or designing a picture or graphic to show the relationships and connections among place value, division, and fractions.

WHAT IS THE DIFFERENCE?

There are some foundational belief differences between a differentiated class and a more traditionally taught class. Figure 1.7 gives a summary list of some of these differences. All of the differentiated aspects will be developed throughout the rest of the book and through the video clips.

Consider It!

In this example, most of the mathematics lesson was differentiated. That is not always the case. Often one aspect of a lesson will be differentiated in some way, such as a choice of closure activities or a tiered practice:

- How do you respond to this lesson?
- How many types of differentiation do you feel can be done with your students?
- Of what parts are you unsure?
- Make a list of pros and cons from this lesson as a baseline for your learning as you work through this book.

FIGURE 1.7**TRADITIONAL VERSUS DIFFERENTIATED CLASSROOM**

More Traditional Mathematics Classroom	Differentiated Mathematics Classroom
Student differences are ignored or avoided	Student differences form the basis of lesson design.
Texts and resources are the basis for instruction	Standards and knowledge of students as learners are the basis for instruction.
Predominantly teacher presentation	Teacher provides means for students to make connections through investigation, collaboration, and communication.
Predominantly whole class	Students are grouped to work in a variety of ways, including in pairs, in small groups, alone, and as a whole class. Pairs and groups are purposefully designed.
A single pace is expected for all students	As much as possible, flexible time and due dates are used for students who require additional time.
A single lesson or activity is used for all students	Different lesson components or activities are designed to reach all learners, varying in design among readiness, interest, and learning profile.
A single assessment is used	A variety of assessments are used to allow students to demonstrate what they know, understand, and are able to do, with options available when appropriate.
A single definition of success is expected, and it is most often speed and accuracy	Success is rooted in student growth and effort, risk taking, and perseverance.

CONCLUSION

“Educators should be champions of every student who enters the schoolhouse doors” (Tomlinson, 2014, p. 27). I don’t know any educator who doesn’t agree with this statement. And yet too often there are students who feel incapable, unaccepted, and unappreciated, especially in mathematics. As teachers we have incredible power to set the climate of our classrooms, as well as to inspire and transform our students. We know from brain research now that there is no such things as “math people” or “non-math people.” We know effort changes everything. And we know that designing engaging lessons and activities that fit our individual students can change their and our world.

Consider It!

Think about your current classroom practice. No one is purely in one or another category. Where are your current classroom practices as you consider the two columns of “traditional” and “differentiated” classrooms?

FREQUENTLY ASKED QUESTIONS

Q: How can you differentiate when we have the same standards and give a high-stakes standardized test?

A: Differentiation is about maximizing learning for every student. The standards provide the content, or *what* we teach. Differentiation is how we craft the learning experiences for students so that they are able to reach the standards. If students can learn at deeper levels, make sense of what they are learning in ways that make most sense to their brains, and store and retrieve from memory more effectively, they will have greater success on all assessments including the high-stakes standardized tests.

Q: What about students who refuse to try?

A: I wish I had a foolproof answer. There isn't one. Nonetheless, students who are in a class where they feel accepted, have some voice in their learning, and know that the teacher believes in them will almost always start to change their behavior. Usually the behavior comes from negative past experiences, and replacing those beliefs about school and how they fit school with positive experiences and a taste of success goes a long way. There is nothing like relationships to begin to heal students who are shut down.

Q: How do you find time to do all of this?

A: First remember that no one differentiates every lesson every day. The start of differentiation can be frustrating because you don't have activities and plans ready to go. Think about what you already have, and gather ideas from colleagues and the Internet as you are able. Instead of choosing which activity you want to use, determine which students would best relate to which of the tasks. Then use them all and you have a differentiated lesson. The best advice comes from Carol Ann Tomlinson: Start slow, but start.

Keepsakes and Plans

What are the keepsake ideas from this chapter, those thoughts or ideas that resonated with you that you do not want to forget?

What Is Differentiation:

- 1.
- 2.
- 3.

The Learning Environment:

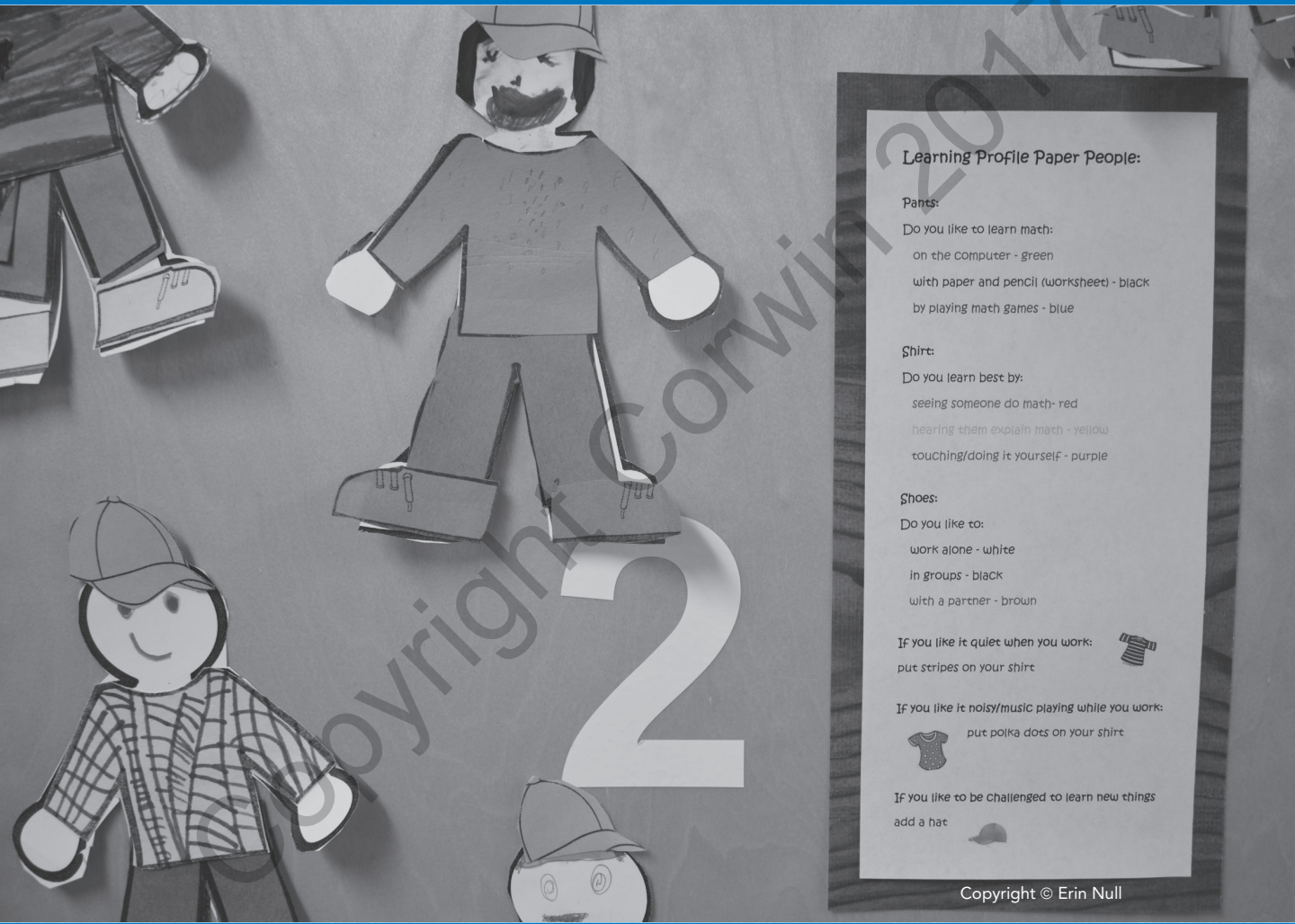
- 1.
- 2.
- 3.

A Glance at a Differentiated Classroom:

- 1.
- 2.
- 3.

Based on my keepsake ideas, I plan to

- 1.
- 2.
- 3.



Learning Profile Paper People:

Pants:

- Do you like to learn math:
 - on the computer - green
 - with paper and pencil (worksheet) - black
 - by playing math games - blue

Shirt:

- Do you learn best by:
 - seeing someone do math - red
 - hearing them explain math - yellow
 - touching/doing it yourself - purple

Shoes:

- Do you like to:
 - work alone - white
 - in groups - black
 - with a partner - brown

If you like it quiet when you work:
put stripes on your shirt



If you like it noisy/music playing while you work:
put polka dots on your shirt



If you like to be challenged to learn new things
add a hat

