Mapping a Route Toward Differentiated Instruction

Even though students may learn in many ways, the essential skills and content they learn can remain steady. That is, students can take different roads to the same destination.

Carol Ann Tomlinson

Developing academically responsive classrooms is important for a country built on the twin values of equity and excellence. Our schools can achieve both of these competing values only to the degree that they can establish heterogeneous communities of learning (attending to issues of equity) built solidly on high-quality curriculum and instruction that strive to maximize the capacity of each learner (attending to issues of excellence).

A serious pursuit of differentiation, or personalized instruction, causes us to grapple with many of our traditional—if questionable—ways of "doing school." Is it reasonable to expect all 2nd graders to learn the same thing, in the same ways, over the same time span? Do single-textbook adoptions send inaccurate messages about the sameness of all learners? Can students learn to take more responsibility for their own learning? Do report cards drive our instruction? Should the classroom teacher be a solitary specialist on all learner needs, or could we support genuinely effective generalist-specialist teams? Can we reconcile learning standards with learner variance?

The questions resist comfortable answers—and are powerfully important. En route to answering them, we try various roads to differentiation. The concreteness of having something ready to do Monday morning is satisfying—and inescapable. After all, the students will arrive and the day must be planned. So we talk about using reading buddies in varied ways to support a range of readers or perhaps developing a learning contract with several options for practicing math skills. Maybe we could try a tiered lesson or interest centers. Three students who clearly understand the chapter need an independent study project. Perhaps we should begin with a differentiated project assignment, allowing students to choose a project about the Middle Ages. That's often how our journey toward differentiation begins.
The nature of teaching requires doing. There's not much time to sit and ponder the imponderables. To a point, that's fine—and, in any case, inevitable. A reflective teacher can test many principles from everyday interactions in the classroom. In other words, philosophy can derive from action.

We can't skip one step, however. The first step in making differentiation work is the hardest. In fact, the same first step is required to make all teaching and learning effective: We have to know where we want to end up before we start out—and plan to get there. That is, we must have solid curriculum and instruction in place before we differentiate them. That's harder than it seems.

Looking Inside Two Classrooms

Mr. Appleton is teaching about ancient Rome. His students are reading the textbook in class today. He suggests that they take notes of important details as they read. When they finish, they answer the questions at the end of the chapter. Students who don't finish must do so at home. Tomorrow, they will answer the questions together in class. Mr. Appleton likes to lecture and works hard to prepare his lectures. He expects students to take notes. Later, he will give a quiz on both the notes and the text. He will give students a study sheet before the test, clearly spelling out what will be on the test.

Mrs. Baker is also teaching about ancient Rome. She gives her students graphic organizers to use as they read the textbook chapter and goes over the organizers with the class so that anyone who missed details can fill them in. She brings in pictures of the art and the architecture of the period and tells how important the Romans were in shaping our architecture, language, and laws. When she invites some students to dress in togas for a future class, someone suggests bringing in food so that they can have a Roman banquet—and they do. One day, students do a word-search puzzle of vocabulary words about Rome. On another day, they watch a movie clip that shows gladiators and the Colosseum and talk about the favored "entertainment" of the period. Later, Mrs. Baker reads aloud several myths, and students talk about the myths that they remember from 6th grade. When it's time to study for the test, the teacher lets students go over the chapter together, which they like much better than working at home alone, she says.

She also wants students to like studying about Rome, so she offers a choice of 10 projects. Among the options are creating a poster listing important Roman gods and goddesses, their roles, and their symbols; developing a travel brochure for ancient Rome that a Roman of the day might have used; writing a poem about life in Rome; dressing dolls like citizens of Rome or drawing the fashions of the time; building a model of an important ancient Roman building or a Roman villa; and making a map of the Holy Roman Empire. Students can also propose their own topic.
Thinking About the Two Classrooms

Mr. Appleton's class is not differentiated. He does not appear to notice or respond to student differences. Mrs. Baker's is differentiated—at least by some definitions. Each class has serious flaws in its foundations, however, and for that reason, Mrs. Baker's class may not be any more successful than Mr. Appleton's—and perhaps less so.

Successful teaching requires two elements: student understanding and student engagement. In other words, students must really understand, or make sense of, what they have studied. They should also feel engaged in or "hooked by" the ways that they have learned. The latter can greatly enhance the former and can help young people realize that learning is satisfying.

Mr. Appleton's class appears to lack engagement. There's nothing much to make learning appealing. He may be satisfied by his lecture, but it's doubtful that many of the students are impressed. It is also doubtful that much real student understanding will come from the teaching-learning scenario. Rather, the goal seems to be memorizing data for a test.

Memorizing and understanding are very different. The first has a short life span and little potential to transfer into a broader world. However, at least Mr. Appleton appears clear about what the students should memorize for the test. Mrs. Baker's class lacks even that clarity.

Students in Mrs. Baker's classroom are likely engaged. It is a lively, learner-friendly place with opportunity for student movement, student choice, and peer work. Further, Mrs. Baker's list of project options draws on different student interests or talents—and she is even open to their suggestions.

Although Mrs. Baker succeeds to some degree with engagement, a clear sense of what students should understand as a result of their study is almost totally missing. Thus her careful work to provide choice and to build a comfortable environment for her learners may not net meaningful, long-term learning. Her students are studying "something about ancient Rome." Nothing focuses or ties together the ideas and information that they encounter. Activities are more about being happy than about making meaning. No set of common information, ideas, or skills will stem from completing the various projects. In essence, she has accomplished little for the long haul. Her "differentiation" provides varied avenues to "mush"—multiple versions of fog. Her students work with different tasks, not differentiated ones.

Mr. Appleton's class provides little engagement, little understanding, and scant opportunity for attending to student differences. Mrs. Baker's class provides some engagement, little understanding, and no meaningful differentiation.

An Alternative Approach

To make differentiation work—in fact, to make teaching and learning work—teachers must develop an alternative approach to instructional planning beyond "covering the text" or
"creating activities that students will like."

Ms. Cassell has planned her year around a few key concepts that will help students relate to, organize, and retain what they study in history. She has also developed principles or generalizations that govern or uncover how the concepts work. Further, for each unit, she has established a defined set of facts and terms that are essential for students to know to be literate and informed about the topic. She has listed skills for which she and the students are responsible as the year progresses. Finally, she has developed essential questions to intrigue her students and to cause them to engage with her in a quest for understanding.

Ms. Cassell's master list of facts, terms, concepts, principles, and skills stems from her understanding of the discipline of history as well as from the district's learning standards. As the year evolves, Ms. Cassell continually assesses the readiness, interests, and learning profiles of her students and involves them in goal setting and decision making about their learning. As she comes to understand her students and their needs more fully, she modifies her instructional framework and her instruction.

Ms. Cassell is also teaching about ancient Rome. Among the key concepts in this unit, as in many others throughout the year, are culture, change, and interdependence. Students will be responsible for important terms, such as republic, patrician, plebeian, veto, villa, and Romance language; names of key individuals, for example, Julius Caesar, Cicero, and Virgil; and names of important places, for instance, the Pantheon and the Colosseum.

For this unit, students explore key generalizations or principles: Varied cultures share common elements. Cultures are shaped by beliefs and values, customs, geography, and resources. People are shaped by and shape their cultures. Societies and cultures change for both internal and external reasons. Elements of a society and its cultures are interdependent.

Among important skills that students apply are using resources on history effectively, interpreting information from resources, blending data from several resources, and organizing effective paragraphs. The essential question that Ms. Cassell often poses to her students is, How would your life and culture be different if you lived in a different time and place?

**Looking Inside the Third Classroom**

Early in the unit, Ms. Cassell's students begin work, both at home and in class, on two sequential tasks that will extend throughout the unit as part of their larger study of ancient Rome. Both tasks are differentiated.

For the first task, students assume the role of someone from ancient Rome, such as a soldier, a teacher, a healer, a farmer, a slave, or a farmer's wife. Students base their choice solely on their own interests. They work both alone and with others who select the same topic and use a wide variety of print, video, computer, and human resources to understand what their life in
ancient Rome would have been like.

Ultimately, students create a first-person data sheet that their classmates can use as a resource for their second task. The data sheet calls for the person in the role to provide accurate, interesting, and detailed information about what his or her daily schedule would be like, what he or she would eat and wear, where he or she would live, how he or she would be treated by the law, what sorts of problems or challenges he or she would face, the current events of the time, and so on.

Ms. Cassell works with both the whole class and small groups on evaluating the availability and appropriate use of data sources, writing effective paragraphs, and blending information from several sources into a coherent whole. Students use these skills as they develop the first-person data sheets. The teacher's goal is for each student to increase his or her skill level in each area.

The second task calls on students to compare and contrast their own lives with the lives of children of similar age in ancient Rome. Unlike the first task, which was based on student interest, this one is differentiated primarily on the basis of student readiness. The teacher assigns each student a scenario establishing his or her family context for the task: "You are the eldest son of a lawmaker living during the later years of the period known as Pax Romana," for example. Ms. Cassell bases the complexity of the scenario on the student's skill with researching and thinking about history. Most students work with families unlike those in their first task. Students who need continuity between the tasks, however, can continue in a role familiar from their first investigation.

All students use the previously developed first-person data sheets as well as a range of other resources to gather background information. They must address a common set of specified questions: How is what you eat shaped by the economics of your family and by your location? What is your level of education and how is that affected by your status in society? How is your life interdependent with the lives of others in ancient Rome? How will Rome change during your lifetime? How will those changes affect your life? All students must also meet certain research and writing criteria.

Despite the common elements, the task is differentiated in several ways. It is differentiated by interest because each student adds questions that are directed by personal interests: What games did children play? What was the practice of science like then? What was the purpose and style of art?

Readiness differentiation occurs because each student adds personal research and writing goals, often with the teacher's help, to his or her criteria for success. A wide range of research resources is available, including books with varied readability levels, video and audiotapes, models, and access to informed people. The teacher also addresses readiness through small-
group sessions in which she provides different sorts of teacher and peer support, different kinds of modeling, and different kinds of coaching for success, depending on the readiness levels of students.

Finally, the teacher adds to each student's investigation one specific question whose degree of difficulty is based on her most recent assessments of student knowledge, facility with research, and thinking about history. An example of a more complex question is, How will your life differ from that of the previous generation in your family, and how will your grandchildren's lives compare with yours? A less complex, but still challenging question is, How will language change from the generation before you to two generations after you, and why will those changes take place?

Learning-profile differentiation is reflected in the different media that students use to express their findings: journal entries, an oral monologue, or a videotape presentation. Guidelines for each type of product ensure quality and focus on essential understandings and skills established for the unit. Students may work alone or with a "parallel partner" who is working with the same role, although each student must ultimately produce his or her own product.

At other points in the study of ancient Rome, Ms. Cassell differentiates instruction. Sometimes she varies the sorts of graphic organizers that students use when they read, do research, or take notes in class. She may use review groups of mixed readiness and then conduct review games with students of like readiness working together. She works hard to ask a range of questions that move from concrete and familiar to abstract and unfamiliar in all class discussions. She sometimes provides homework options in which students select the tasks that they believe will help them understand important ideas or use important skills best. Of course, the class also plans, works, reviews, and debates as a whole group.

Students find Ms. Cassell's class engaging—and not just because it's fun. It's engaging because it shows the connection between their own lives and life long ago. It helps them see the interconnectedness among times in history and make links with other subjects. It tickles their curiosity. And it provides a challenge that pushes each learner a bit further than is comfortable—and then supports success. Sometimes those things are fun. Often they are knotty and hard. Always they dignify the learner and the subject.

Ms. Cassell's class is highly likely to be effective for her varied learners, in part because she continually attempts to reach her students where they are and move them on—she differentiates instruction. The success of the differentiation, however, is not a stand-alone matter. It is successful because it is squarely rooted in student engagement plus student understanding.

This teacher knows where she wants her students to arrive at the end of their shared learning journey and where her students are along that journey at a given time. Because she is clear
about the destination and the path of the travelers, she can effectively guide them, and she
varies or differentiates her instruction to accomplish this goal. Further, her destination is not
merely the amassing of data but rather the constructing of understanding. Her class provides a
good example of the close and necessary relationship between effective curriculum and
instruction and effective differentiation.

The First Step Is the Compass

Mr. Appleton may have a sense of what he wants his students to know at the end of the road,
but not about what his students should understand and be able to do. He teaches facts, but no
key concepts, guiding principles, or essential questions. With a fact-based curriculum,
differentiating instruction is difficult. Perhaps some students could learn more facts and some,
fewer. Perhaps some students could have more time to drill the facts, and some, less. It's
difficult to envision a defensible way to differentiate a fact-driven curriculum, probably because
the curriculum itself is difficult to defend.

Mrs. Baker also appears to lack a clear vision of the meaning of her subject, of the nature of
her discipline and what it adds to human understanding, and of why it should matter to a
young learner to study old times. There is little clarity about facts—let alone concepts, guiding
principles, or essential questions. Further, she confuses folly with engagement. She thinks that
she is differentiating instruction, but without instructional clarity, her activities and projects are
merely different—not differentiated. Because there is no instructional clarity, there is no basis
for defensible differentiation.

Ms. Cassell plans for what students should know, understand, and be able to do at the end of a
sequence of learning. She dignifies each learner by planning tasks that are interesting,
relevant, and powerful. She invites each student to wonder. She determines where each
student is in knowledge, skill, and understanding and where he or she needs to move. She
differentiates instruction to facilitate that goal. For her, differentiation is one piece of the
mosaic of professional expertise. It is not a strategy to be plugged in occasionally or often, but
is a way of thinking about the classroom. In her class, there is a platform for differentiation.

Ms. Cassell helps us see that differentiated instruction must dignify each learner with learning
that is "whole," important, and meaning making. The core of what the students learn remains
relatively steady. How the student learns—including degree of difficulty, working
arrangements, modes of expression, and sorts of scaffolding—may vary considerably.
Differentiation is not so much the "stuff" as the "how." If the "stuff" is ill conceived, the "how"
is doomed.

The old saw is correct: Every journey does begin with a single step. The journey to successfully
differentiated or personalized classrooms will succeed only if we carefully take the first step—
ensuring a foundation of best-practice curriculum and instruction.
A serious pursuit of differentiation, or personalized instruction, causes us to grapple with many of our traditional if questionable ways of "doing school." Is it reasonable to expect all 2nd graders to learn the same thing, in the same ways, over the same time span? Do single-textbook adoptions send inaccurate messages about the sameness of all learners? Perhaps we should begin with a differentiated project assignment, allowing students to choose a project about the Middle Ages. That's often how our journey toward differentiation begins. http://pdonline.ascd.org/pd_online/diffinstr/el199909_tomlinson.html (1 of 8) [2008-01-27 11:51:46]. Mapping a Route Toward Differentiated Instruction // Carol Ann Tomlinson. The nature of teaching requires doing. September 1999 | Volume 57 | Number 1 Personalized Learning Pages 12-16 Mapping a Route Toward Differentiated Instruction Even though students may learn in many ways, the essential skills and content they learn can remain steady. That is, students can take different roads to the same Ann Tomlinson Developing academically responsive classrooms is important for a country built on the twin values of equity and excellence. Should report cards drive our instruction? Should the classroom teacher be a solitary specialist on all learner needs, or could we support genuinely effective generalist-specialist teams? Can we reconcile learning standards with learner variance? The questions resist comfortable answers and are powerfully important. Mapping a Route Toward Differentiated Instruction. Educational Leadership 57(1), 12-16. Tomlinson, C.A. (1999). The Differentiated Classroom: Responding to the Needs of all Learners. Alexandria, VA: Association for Supervision and Curriculum Development. Tomlinson, C.A., Brighton, C., Hertberg, H., Callahan, C.M., Moon, T.R., Brimijoin, K., Conover, L.A., & Reynolds, T. (2003). Differentiating Instruction in Response to Student Readiness, Interest, and Learning Profile in Academically Diverse Classrooms: A Review of Literature. Journal for the Education of the Gifted 27(3), 119-145. Texas