Consistent learning targets, differentiated activities, and hands-on projects set each learner up for success.

In Jennifer Goldin's middle school math classroom, students are getting ready for their next project, which will involve adding and subtracting fractions. Like every good teacher, Goldin knows that her class includes both students who learned their math basics in elementary school and students who have gaps. Some of her students have a natural affinity for the material, and others need support each step along the way; some of her students are abstract thinkers, whereas others are more concrete. To Goldin and her students, this preparation phase is essential; it sets each learner up for success.

“Check your pre-assessment results,” Goldin reminds the class, directing them to examine a pre-test they recently took on fractions. “Which learning targets are emerging for you, and which have you already accomplished?”

Students analyze their individual results using a chart that lists the learning targets each test question was designed to assess (see fig. 1 on p. 68).

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**Figure 1. Checklist for Students' Progress with Fractions**

<table>
<thead>
<tr>
<th>Supporting Learning Target</th>
<th>Pre-Assessment Question #</th>
<th>Accomplished</th>
<th>Developing</th>
<th>Emerging</th>
<th>Incomplete</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can represent a denominator and numerator.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can add fractions with like denominators.</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can subtract fractions with like denominators.</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can add fractions with unlike denominators.</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can subtract fractions with unlike denominators.</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can add mixed numbers with like and unlike denominators.</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can subtract mixed numbers with like and unlike denominators.</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can read and interpret a pictograph.</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Students use their results on a pre-test to monitor their own progress toward learning targets that support
the long-term target "I can develop fluency with addition and subtraction of fractions with like and unlike denominators."

"I'm OK with adding and subtracting fractions when the denominators are the same," muses one student. "But I don't know what to do when they're different."

"I don't even remember what a denominator is," admits another, laughing.

"Looks like I'll be doing some work with mixed numbers," says a third.

When students dive into the new learning the next day, they're not surprised that Goldin has differentiated their work. They're used to examining pre-assessment results and realizing that different students in the class have different starting points for a unit. For this fractions project, some students begin with a minilesson through which Goldin helps them master the basics. Others work on problems that scaffold their understanding of what to do when denominators don't match. Goldin checks on this group once the first group gets rolling with some guided practice. Meanwhile, a third group is immersed in an inquiry activity designed to help them develop a theory about what to do with mixed-number problems.

Goldin, who teaches at Tapestry Charter School in Buffalo, New York, is confident that by the end of the unit, all her students will master the math that's expected of them, and several will progress beyond the grade-level standard. Her students are confident as well. Goldin reflects:

The kids talk openly about their pre-assessment results and their comfort with various learning targets. In the beginning, only the bravest were willing to share—especially if they were feeling "not good" about something. But now I'm seeing honesty, ownership, and pride in discussing where they feel their strengths and weaknesses in any unit of study will be. They understand that we use learning targets to name the learning we're all supposed to do … and that I'll differentiate their work so that every student gets what's needed to make progress.

As 6th grader Manny Ocasio puts it, "What's different about Ms. Goldin's class is that she always helps us figure out what we need to learn. You don't have to be doing the same things as other people all the time … I can learn it just how I need to learn it."

**No More Fuzzy Activities**

Part of Goldin's success comes from her clarity about the learning she expects.

Differentiated instruction expert Carol Ann Tomlinson (1999) believes instructional clarity is an essential element of differentiation:

When a teacher lacks clarity about what students should know, understand, and be able to do as a result of a lesson, the learning tasks she creates may or may not be engaging and we can almost be certain the tasks won't help students understand the essential ideas or principles. A fuzzy sense of the essentials results in fuzzy activities. (p. 37)

Unfortunately, fuzzy activities are too often a mainstay of differentiated classrooms. Teachers who aren't certain what learning should occur as a result of a lesson or unit frequently differentiate by letting students choose among loosely related activities. This approach is at the heart of Mike Schmoker's (2010) criticism of differentiated instruction:

I saw frustrated teachers trying to provide materials that matched each student's or group's presumed ability level, interest, preferred "modality," and learning style. The attempt often devolved into a frantically assembled collection of worksheets, coloring exercises, and specious "kinesthetic" activities.

Schmoker's point is true of even non-differentiated classrooms. Too often, teachers fail to set objectives or align instructional activities and assessments with those objectives.

The solution is for teachers to craft standards-based and student-friendly statements of intended learning—what Stiggins, Arter, Chappuis, and Chappuis (2006) call "learning targets"—as the first step in nurturing effective learning and assessing it. Teachers who differentiate have the additional responsibility of ensuring that all the activities they
design for specific students or groups of students align with essential learning targets. The good news is that learning targets put an end to fuzzy activities.

**Learning Targets and Expeditions**

Goldin, whose school is part of the Expeditionary Learning network, spends significant time developing learning targets that engage her students, support them, and hold individual students accountable for their work. Expeditionary Learning is a national nonprofit school improvement organization that partners with public, private, and charter schools to provide professional development for teachers and a model for curriculum, instruction, culture and character, assessment, and leadership. At the heart of this model are long-term, interdisciplinary projects (learning expeditions) that result in authentic products. Teachers create expeditions relevant to their own state standards and students' needs.

For example, at the Odyssey School near Denver, Colorado, middle schoolers tackled an expedition called Feast or Famine. They engaged in scientific study of anatomy, physiology, and nutrition along with issues related to emotional and social health, always interesting to adolescents. This expedition included skills in data analysis and concept mapping as well as in research and reading nonfiction. Students then contributed to an important schoolwide decision on their school lunch program.

Long-term learning targets associated with this expedition connected to a variety of subject areas. For instance the target "I can describe how a healthy body maintains metabolic homeostasis" connected to science standards, and "I can collect and analyze data about the calories, carbohydrates, fats, and proteins I consume" connected to math standards.

Goldin explains how she prepares expeditions that incorporate differentiation:

I'm always looking for standards that I can combine together into some kind of meaningful project ... Once I know what students need to learn and I've created a context for that learning, I create a long-term target that every student will meet—a broad target that encompasses the whole project and that's essential for assessment preparation in our state.

Next, Goldin identifies "supporting targets"—smaller steps students will take to meet the long-term goal, such as "I can add fractions with like denominators." She develops additional targets (within the context of the long-term target) for students who'll need an advanced challenge. Goldin then creates a pre-assessment that aligns with the supporting targets and administers it to students, making no assumptions about how they will do. "Different kids show different strengths with different concepts," she said. "I've learned not to think about my students as 'high' or 'low.' They're just different."

Teachers in Expeditionary Learning schools use learning targets to engage students in conversations about learning and to help students better understand their own achievement and needs through ongoing formative assessment. Targets in these schools start with the stem "I can …," indicating to students what they will achieve as result of a learning experience. Students discover a feeling of satisfaction when they realize, "yes, I can!"—and that feeling translates to achievement. Formative assessment gurus Paul Black and Dylan Wiliam (1998) believe that these formative-assessment practices, which give students a clear vision of the intended learning, combined with effective feedback, are "gap-closing" strategies that particularly help low-achieving students.

In Goldin's class, once students have analyzed their pre-assessments, they place the learning-targets chart in their binder for that unit or project and refer to it as they progress through learning activities geared toward their ultimate goals. Students enjoy pulling out the chart to mark progress on it, such as by changing their rating from *emerging* to *accomplished*. They are motivated to keep going and growing.

How students track their progress toward a target depends on the type of target being assessed. When a target asks students to describe something, for example, teachers might use a rubric to help students understand what an effective description is like and to indicate whether students have met that criteria. If a target indicates that students should "tell" something, their correct answers on a multiple-choice assessment would show they've met the target.
As teachers help students track their progress, students can tell exactly where they are. A student who knows he’s far from meeting a target will realize that he needs additional practice or more scaffolding. And a student who meets a target quickly can tell that she’s ready for an additional challenge.

**Why Not Differentiate Targets?**

Tomlinson (2000) acknowledges that the standards movement has created challenges for teachers who strive to differentiate. However, she concludes that “there is no contradiction between effective standards-based instruction and differentiation … Differentiation can show us how to teach the same standard to a range of learners by employing a variety of teaching and learning modes” (p. 10).

By maintaining a consistent focus on what students will learn, teachers develop a clear road map for success on grade-level expectations and, ultimately, on state assessments. Teachers must find ways to assess students’ different entry points on the path to mastery of those expectations and to determine whether each student is progressing appropriately on the journey. The substantial amount of time teachers put into planning learning targets and differentiating activities pays off: More students succeed initially, and teachers have built-in opportunities to provide all learners additional support and challenges along the way, lessening the need for interventions later on.

One key to maintaining consistent learning targets for all students is to describe the essential learning we expect a student will gain rather than how the student will accomplish that learning. Targets like “I can write paragraphs of 5–7 sentences” or “I can spell the words on this week's list” are too narrow. Try instead “I can write high-quality paragraphs” or “I can recall spelling words that don't follow the rules of standard written English.” Targets like these leave the door open to vary the specific work without compromising the learning.

**How It Works**

Let’s look at a hypothetical example of how learning targets and differentiation work together in a typical Expeditionary Learning classroom. Mr. Bender, a 6th grade social studies teacher, has designed a project centered on emigration from Ireland after the Great Potato Famine. Students will research the conditions in Ireland and determine why many people emigrated. A standards-based learning target for the project might be: “I can gather historical data from multiple sources to demonstrate my understanding of Irish emigration events.”

Following a minilesson in which Mr. Bender models how to gather historical data through reading nonfiction text and taking notes, most students read and take notes on materials that are at their grade level or above, using a teacher-provided recording form. But Mr. Bender knows that several students aren’t reading at grade level. He prepares to meet those students where they are by collecting texts about Irish emigration written at a lower reading level. He also prepares a second note-taking form that explicitly prompts students to stop and think while reading.

Students who receive the simpler text and more structured form are still working on the same essential target—learning to gather historical data. This teacher can rest assured that when he reviews all students’ work, he’s assessing whether students have met that target—and his assessment of that particular proficiency will yield reliable data for his future teaching and grading. Students can also rest assured that this lesson is about note taking, not reading at grade level.

Mr. Bender's students know he will help them track their progress toward effective gathering of historical data, both on this assignment and others. He establishes this expectation by sharing models of notes that he considers proficient and others that are below the standard. The class examines the models and develops a rubric for note taking. Students will assess themselves against this rubric and set goals for how to improve their work and assess their progress toward those goals the next time they take notes as part of a project or assignment.

Consider another learning target that might accompany the creation of a time line connected to Irish emigration. The target reads “I can gather historical data to sequence events.” Notice that the target doesn't state that students will complete a time line, only that they will learn to sequence events.

Let’s imagine that Mr. Bender has pre-assessed his learners and determined they can all appropriately sequence events in a time line. However, he knows some of these learners are novices and some are advanced in gathering
historical data, in terms of both note taking and reading skills. He decides that all students will create a time line and that he will help all of them understand what a high-quality time line looks like and offer opportunities for revision. As the project unfolds, the whole class views a model time line to generate criteria for quality. All learners receive feedback on their time lines from Mr. Bender and their peers and use that information to revise. Most students then use their class notes, the textbook, and a graphic organizer to gather and select information and construct their final time line.

Differentiation comes in at the gathering stage. Those 6th graders who the teacher knows will need additional supports use four events that the teacher provides and three that they find on their own to compile their time lines; they are responsible for sequencing and creating the final product. Students who have indicated they can work at a higher level during the gathering phase have access to higher-level texts and aren't required to use a teacher-provided graphic organizer. They are still responsible for creating a good time line. Thus, advanced learners will aim for the same basic learning target and project tasks as everyone else, but they will do more complex work that stretches their learning.

**Learning for All**

Differentiating instruction based on learning targets enables teachers to maintain rigorous learning for all students. By using differentiation in concert with assessment practices that help students envision excellent work, measure their own proficiency levels, and set goals for growth, teachers can ensure equity and access in heterogeneous classrooms.

Jennifer Goldin makes it a goal for each of her students to show at least a year's worth of growth—whether a kid enters her class far behind and gets closer to what New York State says middle schoolers should know or comes to her class right on target for standards and seeking more challenge. "My students know exactly what they need to do to grow," she says.

**References**


*Author's note:* Mr. Bender is a pseudonym.

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