Goal-setting practices that support a learning culture

Having students set their own goals and monitor their progress is most effective when teachers are able to create a culture, rather than follow prescriptive steps.

By Chase Nordengren



etting students to understand where they are in their learning is a steep challenge with potential for a huge payoff when you are seeking to build school and classroom cultures where improvement and growth flourish. So what can educators do to help students care about their learning and become more invested in their own success? In particular, how can teachers use assessments to motivate students without discouraging or stereotyping them?

Goal setting — one of many forms of student-involved data use (Jimerson & Reames, 2015) — gets students involved in reviewing their assessment results, working with their teachers to set reasonable but aspirational goals for improvement, and continuing to drive their learning with frequent reference to those goals. When implemented well, these goal-setting practices have a significant positive influence on student outcomes and school cultures (Leithwood & Sun, 2018; Moeller, Theiler, & Wu, 2012).

Not surprisingly, students do better when they feel in control of their learning. Robert Marzano's (2009) review of research, for example, finds goal setting can produce student learning gains of between 18 and 41 percentile points. Across a variety of grade levels, subject areas, and studies, effective goal-setting practices help students focus on specific outcomes, encourage them to seek academic challenges, and make clear the connection between immediate tasks and future accomplishments (Stronge & Grant, 2014). Still, not just any form of goal setting will drive learning. Goal setting must tap into four elements of tasks that

CHASE NORDENGREN (chase.nordengren@nwea.org) is a research scientist at NWEA where he focuses on understanding the impact of professional learning offerings on teachers and their students.

motivate students: providing them opportunities to build competence, giving them control or autonomy, cultivating interest, and altering their perceptions of their own abilities (Usher & Kober, 2012). Without these elements, the positive effects of goal setting are lost.

Goals can and do look very different from student to student. Any academic or behavioral outcome — from showing proficiency in multidigit multiplication, to identifying and correctly using question words, to reducing absences and tardies — can play a role in a student's goals. However, the process by which goals are set, monitored, and reviewed is key to ensuring goal setting is successful.

In particular, research calls on teachers to use goal setting to cultivate a mastery orientation, where students focus on overcoming personal challenges or learning as much as possible, instead of approaches driven by hitting specific performance targets or avoiding failure (Wolters, 2004). These orientations are fungible: Even when teachers don't directly set goals, they convey attitudes and provide directives on how goals should be set and interpreted (Marsh, Farrell, & Bertrand, 2014). And, like any element of a school culture, the attitudes teachers convey are heavily influenced by how the rest of the school system thinks about using data and the ways administrators expect teachers to interpret assessment results (Schildkamp & Lai, 2013). Goal setting in isolation, then, is far less likely to be successful than when it is part of a culture where goal setting is common, goals are linked to learning, and students continue goal setting as they change teachers and grades.

As a researcher with NWEA, I have been learning from thousands of schools and districts in the United States and around the world who are using our MAP Growth assessment to help students understand what they know and aspire to learn more. The story of one of these systems, which I call Walnut Hills in this article, illustrates how emphasizing goal setting while providing extensive teacher autonomy allows the mastery orientation to flourish and has a significant influence on school culture.

From mandate to ownership

For several years, Walnut Hills, a medium-size suburban district in the midwestern U.S., has been

using NWEA's MAP Growth assessment to measure student learning. Further, in classrooms across the district, teachers and students have implemented a research-based model of goal setting, in which they take concrete steps to discuss goals, set new ones, and define a learning path for meeting them; the district has linked this goal-setting process to its larger strategy for personalized learning. The deliberate nature of this process, combined with the apparent high level of support from the district and a set of strong cultural expectations for students, teachers, and administrators, make this an interesting case for understanding how to make goal setting part of schools' organizational culture.

The work got off to a slow start, though. At first, the district required teachers to use the same goal-setting worksheets across grade levels, which made the process particularly difficult for younger students to understand. And while there was no problem with student buy-in to the goal-setting process, most schools reserved time for that process only in the days following major tests. Between tests, teachers rarely used formative data to help students define their goals and, perhaps most important, they rarely checked in with students about their goals.

Still, the teachers strongly embraced the program's fundamental values: personalized learning, formative assessment, and student ownership of learning. Over time, then, they found ways to adapt the model to their needs, creating a range of more flexible, classroom-built goal-setting practices that, while they differed somewhat from teacher to teacher, retained the spirit and the research DNA that had driven adoption of the original model.

For example, once it became apparent that her kindergarten and 1st-grade students did not understand the prescribed worksheets, Leslie (all names are pseudonyms) tried creating her own worksheets. This was an improvement, but she still felt "like some of my kids were going through the motions" of goal setting without really understanding why they were doing it. So, to make the process more concrete, she decided to focus on explaining the relevance of goals in daily life, using student-friendly language and breaking the assessment data down into pieces that made sense to them. Over time, she recalled, her students gradually became more accustomed to talking about and setting their learning goals.

Making goal-setting conversations simple, targeted, and short term made them part of the day-to-day instructional life of teachers and students, rather than just another reform mandated by the district.

Similarly, Cassandra, a high school teacher, first encountered the district's goal-setting strategy through a series of professional development workshops, and she knew right away that she would have to adapt the model. The approach was "very complicated," she said, and it happened only alongside testing windows. So she turned to best practices from the research on adult goal setting, with an eye to how it could apply to her students. "It needs to be very simple, it needs to be targeted, it needs to be short term, and there need to be periodic check-ins," she concluded. By applying these changes and seeking regular data points relevant to students' lives, Cassandra created an age-appropriate goal-setting practice focused

on improving student attendance, study behaviors, and credit attainment.

Like Leslie and Cassandra, other teachers in Walnut Hills now use regular student conferencing, encourage student involvement in setting goals and checkpoints, and rely on multiple forms of assessment data, including graphics and other visual representations, to keep student goals front and center in their classrooms. These teachers had seen the benefits of goal setting through the model and sought to boil it down to its essential elements. Making goal-setting conversations simple, targeted, and short term made them part of the day-to-day instructional life of teachers and students, rather than just another reform mandated by the district.

Making goal setting work

While each teacher I observed in Walnut Hills took a slightly different approach to goal setting, their shared practices paint a picture of an organic and dynamic process that maintains consistency for students from kindergarten through graduation:

Start early. Goal setting in Walnut Hills starts as early as kindergarten. Since these students may not be ready at first to think about individual

academic goals, teachers begin with classwide goals for behavior and developing skills. Then they move on to setting simple individual goals, such as learning a set of letters or spending a certain amount of time on task. Through the process of setting goals for their class and for themselves, young children learn to understand what a goal is and how it contributes to learning.

More important than the substance of goals for young students, however, is the process. "We talk about why we make a goal, what is the purpose of it, how it guides your learning, and how proud you are when you hit that goal," says Leslie. For her, the objective of goal setting with the youngest kids is to provide a set of norms and expectations that prepare them to set specific and measurable goals in later grades. Jodi, an early grades teacher at another school, echoed this idea: "We see a lot of success by starting so young that by the older grades... they can start to do a lot more of that on their own."

Do it often. Each of the teachers I spoke with in Walnut Hills engaged their students in setting short-term goals, usually lasting no longer than four to six weeks. Short-term goals invited frequent check-ins with students, at least weekly if not daily. In turn, these check-ins allowed for frequent revision of goals based on student progress, preventing students from feeling discouraged: With several opportunities to observe progress, a goal not yet met becomes a goal that can be met in the future with additional effort.

The goal-setting process often begins with a conference in which students answer questions like those Karen used: "What is an appropriate goal?" and "Why do we think this is an appropriate goal for you?" During regular check-ins, teachers confer with students about current work, its relationship to their goals, and strategies they use to improve learning. A goal-setting conference at the end of the process facilitates reflection on learning, answering questions like these from Karen: "What do you notice about your work from the beginning till now?" and "How do you feel like you grew?"

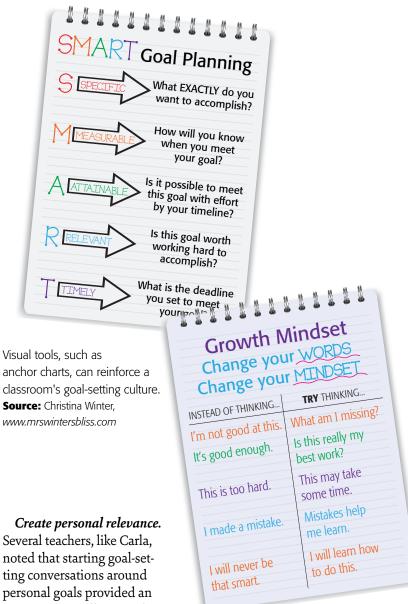
Maximizing the frequency of goal-setting check-ins may require relaxing more complex or drawn-out procedures in favor of quick conversations focused on a handful of key questions. The Walnut Hills teachers note that whatever they've lost by moving away from the initial structured model toward something more heterogenous is

more than made up for by the opportunity they now have to reinforce growth mindsets, practice academic conversations, and make regular individual contact with each student.

Make it visual. Goal-setting teachers rely on a variety of visual tools and artifacts to help solidify their goal-setting culture. At a whole-class level, these may include anchor charts referencing classroom goals or graphs showing student progress toward particular learning goals or assessment targets (without showing individual student names). On an individual level, these can include data notebooks, personalized learning plans (either physical or through a digital system that can be shared with parents and other teachers), and goal-setting worksheets.

The teacher-created worksheets I observed have much in common:

- First, they focus on identifying the goal and setting a firm end date for achieving it. If students have experience with SMART (specific, measurable, attainable, relevant, and time-bound) goals, the worksheets may reference those guidelines.
- Second, worksheets ask students to describe actionable steps to get to their goal. These can include a certain amount of mathematics practice per week, a certain number of pages to read each night, or even a set of behaviors like coming to school on time. These steps enable students to truly tailor the goal to their own learning. As Carla observes, "They've got their picture, they take a learning style inventory, they pace their results" and use other tools to identify steps that are achievable for them.
- Finally, goal-setting artifacts ask students to describe evidence they have reached their goal. This can include reflection, essays or other work products, or feedback from teachers or peers. All teachers I spoke with emphasized that test scores provide only one piece of a broader set of evidence of learning, but they could support students motivated by seeing their progress on a scale, so long as those results were connected in concrete ways to learning objectives. In requiring evidence of learning, the objective of these educators was to provide multiple avenues through which students could demonstrate their own improvement in ways that motivated them.



noted that starting goal-setting conversations around personal goals provided an opportunity to illustrate the benefits of goal setting:

> I have them think about something they're struggling with, whether it's getting their homework done or getting their chores done or anything. And then we start looking at, "OK, what could we do to fix that?" And so we set a goal around that and then that leads more into, "Now let's focus on the school aspect. What are things that you're struggling with at school?"

Many teachers referenced goals they had set in their personal lives as an opportunity to make goal setting more relevant. For Nancy, a goal-setting conversation begins with, "What do you as a person want to be? And then what's the area, academically, you want us to help you with?"



The need for personal relevance also underlines the significance of relationship building in ensuring goal-setting success.

Conferring with stu-

Conferring with students, Kerry said, provides "more bang for your buck" by allowing you to both build relationships with students and learn their specific, individualized learning needs. Even when a goal-setting conversation focuses on improving a grade or reaching an arbitrary milestone, goal-setting conversations can help students

recognize, as Cassandra said, "that they have some control over their grade." However, none of the teachers I spoke with used goal success as a factor in student grades. Instead, goal setting served as a tool to more clearly illustrate

the relationship between learning activities, mastery, and a final grade, encouraging student and teacher to engage in conversations around performance before report cards came due.

Center student choice. Finally, student ownership of learning is maximized where students feel a sense of agency and choice. Goal-setting teachers serve as directors of learning: breaking larger goals down into skill areas, suggesting goals based on skills students are missing, and outlining the steps necessary to get to a particular goal, but ultimately leaving selection of the goal itself in the hands of students. Even for young students who are less capable of self-reflection, the appearance of choice is key. Leslie said, "I might give them two goals, or three. Then I kind of let them pick [even though] you're still providing the goal for them."

These early choices reinforce a culture of student choice that pays off as students become more self-aware, as Carla explained: "I'm kind of giving them the goal, so to speak, but eventually they'll start setting their own ... you actually sit down and listen to a kid who has a goal that they want to achieve and help them figure out the steps to get there, because that's where they are stuck." In goal-setting



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MR. GRENWALD HAS SOMETHING TO SAY ABOUT YOUR SON'S AIM.

conversations like these, the teacher still plays an active role, ensuring goals are specific, measurable, and connected to learning. They also play an important continuous role in celebrating accomplishments to promote persistence and encourage confidence. Ultimately, however, the aim of goal setting as a schoolwide cultural practice is to provide a gradual release toward self-sufficient goal setting. Karen said, "I think the best goal-setting conferences are the ones where students are able to look at their work, look at the metric piece, and actually be able to say, 'You know what? I'm not there yet,' independently but [also to recognize] 'I can be there. This is what I need to do, though."

Bringing it all together

Goal setting by and for students helps form the glue that binds assessment events together. Through goal setting, students develop the skills to reflect on their learning and turn their understanding of their current knowledge and skills into a drive to learn more.

In classrooms exemplifying student ownership of learning, "Students know where they are going, where they are, and how to close the gap" (Chan et al., 2014, p. 112). The goal-setting practices I observed among teachers in Walnut Hills focus on identifying these three touch points, returning to them regularly, and empowering students to play an equal role in identifying what they will learn and the processes that will get them there.

Rick Stiggins (2002) refers to the best formative assessment as "assessment for learning," a source of comfortable motivation for students to fulfill their ambitions instead of a source of anxiety and fear. In tandem with such assessment, effective goal setting engages students in understanding how learning is measured, the myriad ways it can manifest, and the direct relationship between what is learned in school and what students want for their lives. Student-owned goal setting, undertaken through a diversity of teaching styles and approaches, is a critical strategy for any school or district looking to create a culture of lifelong learning.

The most effective teachers model the behavior they expect from their students: They set goals

for themselves, monitor progress against them frequently, and reflect on how their daily learning matches their goals. However, administrators must also leverage the example their teachers set to encourage broader organizational shifts that ensure students engage in continuous goal setting between grades and schools, making the practice part of the standard operating procedure of the district.

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