NWEA Guidance on the Creation and Use of Student Learning Objectives (SLOs)

Updated November 2017





Table of Contents

1. Introduction	1
2. Research on Goal Setting	2
3. Attributes of High-Quality Goals	2
3.1. Goal Specificity	2
3.1.1. Goals for Simple vs. Complex Tasks	
3.1.2. Connecting Teacher Learning Goals and Student Outcome Measures	2
3.2. Goal Difficulty	3
3.2.1. Teacher Perception	3
3.2.2. Short-Term Goals	3
3.2.3. Perceived Fairness of the Teacher Evaluation Process	4
4. SLO Participation	4
5. SLO Development Factors and Considerations	5
6. Support from NWEA	6
6.1. Recommendations	
6.2. Using MAP Growth Data in SLOs	6
References	7

1. Introduction

This document provides guidance on the research, policies, and practices necessary for appropriate development and implementation of student growth goals, which are often referred to as Student Learning Objectives (SLOs). Over the past few years, federal and state education policies have shifted to require teachers to set SLOs with the intention of strengthening accountability for improving student outcomes. These goals are typically part of a teacher evaluation process that combines a teacher's attainment of SLOs with observations of the teacher's performance. Some evaluation systems also require teacher professional development goals. For example, Colorado law requires that 50 percent of an educator's evaluation be based on professional practices and 50 percent be based on multiple measures of student learning (CDE, 2016). Since most teachers do not teach in subjects and grades where students are required to take state tests (Prince et al., 2009), these teachers are required to set SLOs using other rigorous evidence of student growth.

As more states adopt policies on SLOs, various national organizations, including the U.S. Department of Education, have produced reports summarizing SLO features and best practices. According to Lacireno-Paquet, Morgan, & Mello (2014), the SLO process is defined as:

"A participatory method of setting measurable goals, or objectives, based on the specific assignment or class, such as the students taught, the subject matter taught, the baseline performance of the students, and the measurable gain in student performance during the course of instruction" (p. 1).

SLOs can have a positive impact on student learning. For example, in response to policy trends calling for increased emphasis on the role of test results in teacher evaluations, NWEATM offered guidance on factors educators should consider when student test results are used as a primary component of a teacher evaluation system (NWEA, 2014). The guidance document encouraged district leaders to work with their teachers to develop SLOs that consider the actual subject taught by a teacher and that potentially include the use of grade or school-level measures of student improvement. Including teachers in the discussions on how test results are used will help help ensure that evaluations are as fair as possible and that student learning remains at the forefront of all decisions.

The creation of meaningful SLOs is not a simple endeavor and requires:

- An understanding of how setting goals can improve teacher performance
- A moderate level of assessment literacy for teachers and administrators
- A commitment to collaborative discussions between teachers and principals within the SLO-setting process
- A similar level of challenge across all the SLOs created, as well as similarity between the difficulty of SLOs and difficulty of achieving the results determined by other means (e.g., value-added ratings generated with state test data)

The definitions of SLOs and the requirements for the content of SLOs vary across the country, with some more aligned than others with the body of research on how goal setting can improve performance.

2. Research on Goal Setting

More than 45 years of research have shown that teacher goal setting can measurably improve teacher performance and outcomes for students (Locke & Latham, 2013). However, the research also shows that simply having goals will not result in a meaningful change in a teacher's performance. If implemented poorly, goal setting will not provide the benefits that research has shown are possible.

To understand the potential benefits of goal setting, several studies offer interesting findings. For example, the results of a study by the Community Training and Assistance Center (CTAC) found that a teacher setting high-quality goals was associated with higher average student achievement (CTAC, 2004). In a subsequent study, CTAC reported that the implementation of SLOs is associated with a 12–13% improvement in the achievement growth rate of students (CTAC, 2013). This magnitude of improvement is consistent with the broader body of research on this topic (Locke & Latham, 2002; Locke & Latham, 2013; Wegge & Haslem, 2013).

Another notable finding is that goal setting done well can lead to a cycle of continuous improvement for teachers. By successfully attaining goals, teachers feel rewarded, which leads them to believe they can accomplish more with their students. With this strengthened belief in themselves, teachers are more willing to commit to new and more difficult goals (Locke & Latham, 2013).

3. Attributes of High-Quality Goals

Research shows that high-quality goals have two defining characteristics:

- Specificity: how specific the goal is and what the goal is specifying
- Difficulty: a combination of what a teacher's target is and how long the teacher has to achieve it

3.1. Goal Specificity

3.1.1. Goals for Simple vs. Complex Tasks

Having a specific goal that clearly states what is to be achieved is more likely to lead to positive results than an ambivalent, vague goal. For simple tasks, goals specifying measurable outcomes like "increase the average number of widgets you make in one day" can be effective.

However, as tasks become more complex, learning goals (i.e., specific goals to learn how to do something new or better that will result in a better outcome) are more effective at improving teacher performance (Locke & Latham, 2013). For example, a learning goal might be "By June 1, the teacher will implement 10 new formative assessment techniques that were modeled in the school's professional development program." According to Locke and Latham (2013), for complex tasks, goals that only specify measurable outcomes are associated with the same low level of performance improvement as ambivalent, vague goals.

3.1.2. Connecting Teacher Learning Goals and Student Outcome Measures
Learning goals are usually more closely aligned with professional development goals than the
SLOs that require student outcome measures. With education policies requiring student

outcome based SLOs, a bridge is needed between student outcome measures and teacher learning goals. For example, a collaborative inquiry process progresses through various stages and tasks including identifying a student learning problem and goal, verifying causes, generating solutions, and taking action and monitoring results (Love, Stiles, Mundry, & DiRanna, 2008). Through such a process, a teacher can create a learning goal whose achievement should influence attainment of student outcome goals. By establishing both the required SLO and an aligned learning goal, as well as focusing primarily on the attainment of the learning goal, the effectiveness of the teacher should improve and the SLO will have a greater likelihood of being met.

3.2. Goal Difficulty

The difficulty of a goal matters for two reasons:

- 1. To improve the teacher's performance
- 2. To ensure fair and equitable evaluations across teachers

3.2.1. Teacher Perception

When considering the difficulty of a goal in the context of improving a teacher's performance, difficulty is not on an absolute scale but is determined by the perception of each individual teacher. Research has not provided a precise way to define the optimal difficulty, but using peer performance or historical data to determine whether a goal is too easy or too difficult to attain over a given period of time can be envisioned. For example, a teacher's goal to learn four new formative assessment techniques over the entire school year may be too easy if the historical performance of all teachers in the school indicates that 95% of teachers who participated in formative assessment professional development surpassed this target. Conversely, a goal may be too difficult if a teacher struggles to identify how he or she can accomplish the goal.

There should not be too much consideration of individual teacher circumstances when determining goal difficulty. For example, a poor past track record of results for a teacher is not necessarily a circumstance that deserves significant consideration in setting goals. More emphasis should be placed on classroom and student circumstances and less on the teacher themselves (unless they are an early career teacher). When multiple goals are written that encompass both student outcomes and learning goals, it is the overall difficulty of the goal combination that matters. Teachers must believe the attainment of the goals is a challenge but not overwhelming if performance is to benefit (Masuda, Locke, & Williams, 2014).

3.2.2. Short-Term Goals

The perceived difficulty of a goal is also impacted by how far into the future the goal is focused. If accomplishing the goal will take a substantial amount of time, short-term goals are also needed. What is considered "substantial" and how "short-term" the goals should be is a judgment call since research is not conclusive in these areas (Locke & Latham, 2013). However, it is reasonable to structure these short-term goals so that they are supportive of the attainment of the overall goal while still being appropriately challenging (Masuda, Locke & Williams, 2014). For example, if the earlier example of a learning goal regarding 10 new formative assessment techniques was established at the beginning of the school year, a short-term goal in support of the year-long goal could be: "By December 15, the teacher will implement four new formative assessment techniques as modeled in the school's professional development program."

With goals such as these, teachers should be able to understand what is expected of them (specificity) and feel challenged and reasonably confident that they can attain these goals with focused effort for an established period of time (difficulty).

3.2.3. Perceived Fairness of the Teacher Evaluation Process

Since SLOs are used as part of a high-stakes, formal teacher evaluation process, another aspect of difficulty that must also be considered is the perceived and actual fairness of the evaluation process across teachers. The SLO goal setting process should not produce results that hold some teachers (particularly those evaluated by value-added measures on the state test) more accountable than other teachers. It can be problematic if some teachers within a building and grade have goals with difficulties substantively different from their peers. A value-added process is designed to distribute the ratings of teachers and identify teachers at the high and low ends of performance. There is nothing inherent in the SLO process that does the same thing. It is the difficulty of the goal, along with the courage of the evaluator, to differentiate the ratings that provides the similar distribution and therefore the fairness and equity for all.

4. SLO Participation

While the USDE SLO definition stressed the importance of involving teachers in the goal setting process, noting that the SLO process should be "participatory," this may not always be the case in practice. For example, district administrators may require all teachers to have the same goal, or principals may choose to evaluate all teachers on a schoolwide student improvement goal. In both cases, teachers may have limited participation, thereby decreasing their commitment to attaining the goal compared to if they were actively involved in the goal-setting process. Schoolwide goals also do not consider the difficulty level that is optimal or appropriate for individual teachers and their students, and they do not ensure fairness across all teachers. However, a grade level or teacher team process may be possible where there is enough participation and appropriate differentiation of goal difficulty to reap the benefits of goal setting.

Another approach to improve overall grade or school performance is to set goals tailored to each teacher as part of their evaluation, as well as to set challenging goals for a grade or a school outside of the evaluation process that provide direction and focus without a fear of significant negative consequences should the goals be missed (Locke & Latham, 2013).

The impact a goal has on improving performance is also impacted by the level of commitment a teacher has to his or her goals. If there is a perception of fairness in the goal setting and evaluation processes, participation by the teacher in setting the goal improves the teacher's commitment to the goal (Sholihin, Pike, Mangena, & Li, 2011). The teacher's participation with his or her evaluator in setting challenging, appropriate goals makes the use of SLOs beneficial and fair. Without this opportunity to adjust for specific or unique circumstances faced by each teacher, the full power of goal setting will not be harnessed and the overall evaluation system will miss an opportunity to help teachers enter a cycle of continuous improvement based on their own success.

5. SLO Development Factors and Considerations

A teacher and his or her administrator approving the SLO require an appropriate level of assessment knowledge so that they can consider the following assessment-related areas during the SLO development process (NWEA, 2014):

- Test selection
- Proficiency vs. growth
- · Alignment of content assessed and content taught
- Context in goal setting

The appropriate use of context is particularly important in determining specific student growth targets as required by many SLO policies. NWEA (2014) describes four types of context that should be considered:

- Historical: How have my students improved in prior years?
- Similar students: What level of growth have I observed for students similar to mine?
- Classroom/school: What challenges or issues are present in my classroom or school that may impact the amount of improvement shown?
- Track record established by peers within the school or district

One example of the depth of understanding required is the metric often used by NWEA partners in their SLOs: the percent of students meeting or exceeding their growth projections, which are based on means in NWEA's student growth norms. On average, approximately half of all students will show more growth than their growth projections, and the other half will show less growth. In other words, since the student growth projections are set at the average for similar students, the typical teacher working with typical students in a typical setting would be expected to have approximately 50% of students meeting their growth projections.

NWEA has worked with districts that have identified 75% or more of students meeting or exceeding their growth projection as the district's uniform benchmark for what is considered "effective" teacher performance. That percentage was often chosen without any consideration for the prior performance of students in the district as a "one-size-fits-all" approach. While this 75% benchmark might be appropriate for some groups of students and some teachers, it likely will not be appropriate for all students and all teachers (Jensen, 2013).

Some states require teachers to set goals for each student in their class with the teacher's rating dependent on the percentage of students who meet their individual goals. Metrics like the growth index and the conditional growth percentile can assist in setting individual student level goals. Since student growth across the country is normally distributed, 50% of students grow between the 25th and 75th percentile. Since teacher ratings are substantially normative (i.e., teacher ratings compare one teacher to another), growing students within a range where the bulk of students grow is one way to view typical teacher performance.

When setting a student learning goal, learning in both an overall subject and in one area may be warranted. For example, if there is a clear need to improve the ability to manipulate fractions, goals should be set to improve in both fractions and mathematics. If a goal is set for fractions alone, performance in other areas of mathematics may suffer due to an increased focus of time

and energy on fractions. By having a goal on overall mathematics as well, the tendency to sacrifice other areas to attain the fractions goal is balanced.

6. Support from NWEA

6.1. Recommendations

Based on the existing research, NWEA has three broad recommendations that educators should consider in the development of SLOs:

- Keep student learning as the priority. Rather than creating goals solely containing measured student growth as the outcome target, use the amount of desired student growth as a starting point for formative and collaborative conversations about what a teacher needs to learn or do differently to achieve that target. From these conversations, establish both outcome and learning goals and focus primarily on the attainment of the learning goal. The administrators should then offer support and provide the feedback needed for the teachers to reach their goals. If emphasis is placed on the learning goals while still complying with state regulations, teacher performance will improve.
- Ensure that teachers and administrators have adequate assessment knowledge. Choosing the appropriate measures and metrics within a context can be somewhat complex. Making sure both teachers and administrators have adequate knowledge about these issues through professional development or other supports is needed to ensure that the choices made reinforce the focus on improving student outcomes while maintaining fairness to teachers.
- Treat each classroom situation uniquely while recognizing the need to have similar expectations for all teachers. Allow for flexibility in the goals that are set based on a variety of contextual variables, including the students that the teacher will teach, the teacher's past results, the results of other similar students and teachers, how long the teacher has been in the classroom, and characteristics of the school itself. At the same time, the difficulty of each goal needs to be reasonably consistent across all teachers so that there is a fair and equitable process to determining a teacher's rating.

By implementing this guidance, the SLOs created and used as a portion of a teacher's evaluation will be fairer to teachers, yield overall improvement in teacher performance, and ultimately have a greater likelihood of improving the rate of learning for the teachers' students.

6.2. Using MAP Growth Data in SLOs

If you are using MAP® Growth[™] data in your SLOs, NWEA coaches can join you onsite to help staff build local capacity in using the most appropriate data given your context. Participants will have a chance to consider local factors and practice using MAP Growth reports to pull out the data they need for their SLOs. Coaches can also focus on boosting staff assessment literacy, improving goal-focused planning protocols, or exploring any other data topic. To learn more and discuss your needs, contact your account manager by email or call 866-654-3246.

References

- Colorado Department of Education (CDE). (2016, July). Determining final effectiveness ratings using the Colorado state model evaluation system for teachers. Retrieved from https://www.cde.state.co.us/educatoreffectiveness/determining-a-final-educator-effectiveness-rating.
- Community Training and Assistance Center (CTAC). (2004, January). *Catalyst for change: Pay for performance in Denver, final report*. Retrieved from http://www.ctacusa.com/wp-content/uploads/2013/11/CatalystForChange.pdf.
- Community Training and Assistance Center (CTAC). (2013). *It's more than money*. Retrieved from http://www.ctacusa.com/PDFs/MoreThanMoney-report.pdf.
- Jensen, N. (2013, November). *Using the percentage of students meeting or exceeding their growth projections as an evaluation tool.* Portland, OR: NWEA. Retrieved from https://www.nwea.org/blog/2013/using-percentage-students-meeting-exceeding-growth-projections-evaluration-tool/.
- Lacireno-Paquet, N., Morgan, C., & Mello, D. (2014, March). How states use student learning objectives in teacher evaluation systems: A review of state websites. Washington, DC: U.S. Department of Education. Retrieved from https://ies.ed.gov/ncee/edlabs/regions/northeast/pdf/REL_2014013.pdf.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, *57*(9), 705–717.
- Locke, E. A., & Latham, G. P. (2013). *New developments in goal setting and task performance*. New York, NY: Routledge.
- Love, N., Stiles, K. E., Mundry, S., & DiRanna, K. (2008). *The data coach's' guide to improving learning for all students: Unleashing the power of collaborative inquiry*. Thousand Oaks, CA: Corwin Press.
- Masuda, A. D., Locke, E. A., & Williams, K. J. (2014). The effects of simultaneous learning and performance goals on performance: An inductive exploration. *Journal of Cognitive Psychology*, *27*(1), 37–52.
- NWEA. (2014). Guidance on the use of student test results in teacher evaluation systems. Updated October 2017. Retrieved from https://www.nwea.org/content/uploads/2017/10/NWEA-Guidance-on-Using-Test-Results-for-Teacher-Evaluations.pdf.
- Prince, C. D., Schuermann, P. J., Guthrie, J. W., Witham, P. J., Milanowski, A. T., & Thorn, C. A. (2009). *The other 69 percent: Fairly rewarding the performance of teachers of non-tested subjects and grades*. Washington, DC: Center for Educator Compensation Reform (CECR). Retrieved from http://www.maine.gov/education/effectiveness/other69Percent.pdf.

- Sholihin, M., Pike, R., Mangena, M. & Li, J. (2011). Goal-setting participation and goal commitment: Examining the mediating roles of procedural fairness and interpersonal trust in a UK financial services organisation. *The British Accounting Review, 43*(2), 135–146.
- Wegge, J., & Haslem, S. A. (2013). When group goal setting fails: The impact of task difficulty and supervisor fairness. In A. Tan. (Ed.), *Creativity, Talent and Excellence* (pp. 165–184). Singapore: Springer.