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Proficiency or Growth?

An Exploration of Two Approaches for Writing Student Learning Targets

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An Exploration of Two Approaches for Writing Student Learning Targets

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Introduction

Student learning and growth have become important factors in measuring educator effectiveness. As states and districts develop new evaluation systems, an often implicit decision is made regarding whether student learning targets are based on measures of proficiency or growth.

There is no doubt that setting student learning targets is a complicated business. A target[1] is typically a teacher's written goal that captures the student learning that will take place within a given interval of instruction. Targets must be rigorous yet attainable—challenging to students and teachers without setting the bar out of reach. If the targets are not rigorous enough, students may reach their targets, but the progress shown may not represent sufficient academic progress. Similarly, if the targets are so ambitious that they are unattainable, evaluators may wrongly perceive that teachers are ineffective in spurring student learning. Within these complex challenges lies another, more simple problem that defines student learning targets: Should targets be based on student proficiency (what students need to master) or student growth (the student learning that needs to be shown across time)?

As outlined in the following discussion, proficiency and growth both have value in measuring student learning. Here, concrete examples of both approaches are highlighted to provide clarity and particular attention is paid to the benefits and drawbacks of each approach. These examples, and this paper as whole, aim to make explicit the inherent—but sometimes overlooked—policy decision (i.e., whether to prioritize proficiency or growth) that often accompanies the building of an evaluation system that includes measures of student learning.

Proficiency Versus Growth

In 2001, the federal reauthorization of the Elementary and Secondary Education Act (ESEA), known as No Child Left Behind (NCLB), emphasized the need for all students to meet or exceed a level of proficiency on state assessments. Since then, federal and state initiatives have emphasized student growth rather than proficiency. This shift in policy calls into question whether proficiency targets or growth targets are a better fit for measuring teachers' contributions to student learning.

Two simple examples of both approaches:

Proficiency target: All students will score at least 70 on the end-of-course assessment.

Growth target: All students will increase their preassessment scores by 30 points on the postassessment.

[1] Student learning targets are often used within student learning objectives, student learning and growth goals, or other similarly named evaluation measures.

A Note on Assessment and Data Literacy

SLO quality is dependent on target quality, and target quality is dependent on assessment quality. Teachers who know how to select and create high-quality assessments and use assessment information to set informed targets will be more likely to set rigorous and realistic targets for students. For many, the conversation around building teacher and principal assessment and data literacy will be a critical step in the development of higher quality SLO targets.

The following sections discuss the benefits and the challenges associated with each approach for setting SLO targets for students. For the purpose of comparison, our discussion looks at proficiency and growth targets as separate entities. It should be noted, however, that hybrid approaches are possible and used in a number of states and districts.[2]

Proficiency Targets

Proficiency targets[3] set a minimum level of achievement that all students are expected to meet on their summative assessments regardless of where they start at the beginning of the instructional period. Teachers often receive information on proficiency levels from the state, the district, or an assessment vendor. Figure 1 provides three sample proficiency targets.

Figure 1. Sample Proficiency Targets

Example 1.	All students will score at least 70 on the end-of-course assessment.
Example 2.	Twenty-five of the 30 students in my class will receive a passing score on the state assessment.
Example 3.	Seventy-five percent of my students will achieve at least 80 percent on the final exam.

What Are the Benefits of Proficiency Targets?

- **Proficiency targets encourage teachers to think about a minimum expectation for student performance.** When setting proficiency targets, teachers must determine the minimum amount of content mastery that students must demonstrate by the end of a course. Proficiency is a valuable concept that supports teachers in aiming for a common expectation of student learning. Generally, measures of student proficiency are based on common standards and are determined by common expectations regarding the critical skills and content knowledge necessary for students to be prepared for success.

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[2] To achieve proficiency, students will often need to demonstrate growth to reach their goals. For example, if the goal is proficiency and 98 percent of the students perform below proficient on a preassessment, then 98 percent of the students will need to show growth to achieve that proficiency target. Similarly, growth targets can be structured in a way that requires students to move up a performance level, which some interpret as requiring students to attain a particular level of proficiency. For example, if a growth target states that a student performing at a developing level at the beginning of the year is expected to be at the proficient level by the end of the year, that target is written as a growth target but addresses levels of proficiency as well.

[3] Some states, including Rhode Island and Indiana, use the term *mastery* instead of proficiency.

- **Proficiency targets do not require preassessments or any other baseline data.** Because the targets reflect minimum expectations (rather than growth) at the end of a course, proficiency targets do not require preassessments and therefore may reduce the need for additional assessments. For this reason, proficiency targets can be valuable, particularly in subjects lacking baseline or trend data (e.g., physics, economics).[4]
- **Proficiency targets reflect a focus on narrowing achievement gaps.** In schools challenged by persistent achievement gaps, a focus on proficiency for all students may be valuable, as long as proficiency is defined in a meaningful way. In some cases, achieving proficiency for all students in one year or semester is not likely or possible, but acknowledging this need is crucial for teachers to lead students to proficiency across time.
- **Proficiency targets are likely more familiar to teachers.** Proficiency goals are similar to the annual measurable objectives used in NCLB, in which a certain minimum percentage of students must meet proficient or above on the state examination each year. Thus, setting a minimum percentage of students who must meet a minimum threshold is commonplace in most schools. That said, teachers are probably more familiar with thinking of proficiency as it applies to school accountability. Teachers may need support to determine what proficiency looks like and how to assess it at the classroom level.
- **Proficiency targets, in many cases, simplify the scoring process when student learning measures are incorporated into evaluation.** Identifying the number or the percentage of students who meet the student learning target can be done easily. On the other hand, scoring growth targets may require calculating each individual student's growth to determine whether the learning target has been met.

What Are the Drawbacks of Proficiency Targets?

- **Proficiency targets may not accurately reflect teachers' impact on student learning.** When student learning is included in teacher evaluations, proficiency targets may overlook student learning that did or did not occur as a result of a teacher's instruction because proficiency targets may not take into account students' baseline level of knowledge at the beginning of a school year. Students may make great gains in their learning as a result of a teacher's efforts, but that success will not be reflected in the teacher's student learning score if the lowest performing students do not achieve proficiency by the end of a school year. For example, in a reading class, if a fourth-grade student begins the year reading at a first-grade level and ends the year reading at a third-grade level, the target

[4] That said, multiple points of data can inform instructional planning while allowing students additional opportunities to demonstrate their learning.

might be considered unmet if the goal was for all students to be proficient on the fourth-grade standards at the end of the year—even though the teacher's efforts resulted in two years of growth in one year. Similarly, a reading teacher with a group of fourth-grade students beginning the year reading at above grade level may not increase students' learning but will still be recognized as being effective with those students because the students met the minimum expectation. If the proficiency level is set artificially low or high, it may seem as if either all students or no students achieved proficiency when that may not actually be the case.

- **Proficiency targets may neglect the highest and lowest performing students.** Because proficiency targets focus on a minimum threshold (generally, what is considered a passing or a proficient score), students who begin at or above the proficient level often do not need to demonstrate any increase in learning at the end of a course for a teacher to meet the student learning target. In addition, teachers may perceive proficiency targets for their lowest performing students as unattainable and instead focus their efforts on the bubble students—those who are not yet proficient but are close to being proficient. Thus, in practice, the implementation of proficiency targets can neglect both the highest performing and the lowest performing students. For an example of how proficiency targets may neglect the highest performing students, see the example of Student A in the appendix.
- **Expecting all students to achieve proficiency within one academic year may not be developmentally appropriate.** Students who begin the year significantly deficient in the prerequisite skills or those with severe disabilities may be unable to achieve proficiency within one school year. For an example of how proficiency targets may expect students to show too much growth in one year, see the example of Student B in the appendix.
- **Proficiency targets may not meet national and state policy requirements.** Some federal and state initiatives require that evaluation ratings be tied to student growth, not achievement or proficiency. States and districts should check applicable regulations to determine whether proficiency measures are allowed. For example, under Race to the Top, School Improvement Grants (SIG), TIF, and the ESEA flexibility waivers, the U.S. Department of Education calls for measures of student growth, not measures of student proficiency. These initiatives expect teachers and leaders to set expectations based on predicted student learning or the individual progress toward proficiency, not general proficiency levels.

Growth Targets

Unlike proficiency targets that set the same postassessment score for all students, growth targets are customized for students based on their preassessment scores or other baseline data. Growth targets have many different forms. Figure 2 provides three sample growth targets.[5]

Figure 2. Sample Growth Targets

Example 4.	All students will increase their preassessment scores by 30 points on the postassessment.	
Example 5.	All of the students scored between 40 and 79 on the science preassessment. They are expected to increase their science postassessment scores based on their science preassessment score.	
	September Science Preassessment Score (out of 100 points)	**May Science Postassessment Score (out of 100 points)**
	40–49	70 or above
	50–59	75 or above
	60–69	80 or above
	70–79	85 or above
Example 6.	All students are expected to increase their performance levels based on the results of a course preassessment.	
	September Preassessment Performance Level	**May Postassessment Performance Level**
	Basic	Developing
	Developing	Proficient
	Proficient	Advanced

What Are the Benefits of Growth Targets?

- **Growth targets recognize that teachers' impact on student learning may look different from student to student.** Growth targets are typically informed by students' baseline knowledge. Thus, teachers determine student targets at the beginning of a school year and then use them as a guide to evaluate their impact

[5] Approaches for writing growth targets vary by state, district, subject, and assessment. In some cases, growth targets may be written for teachers by a state or a district. In other cases, teachers or teacher teams write growth targets that are then approved by school administrators. The information used to inform growth targets also varies. Some states, districts, and teachers may have district data about appropriate growth for students taking a particular assessment that they can use to guide their target-setting process. Other states, districts, and teachers have limited standardized test data on which to base targets, so the target-setting process rests on other sources of information and requires a greater degree of professional judgment.

on students' learning throughout the year. This approach can be beneficial because the growth target can encompass learning from all levels.

- **Growth targets recognize teachers' efforts with all students.** Growth targets allow teachers to set realistic learning goals for all students. For students far below proficiency, it may take more than one year to reach grade level. Students come in at different starting points. Growth goals support teachers in identifying what learning looks like for students at all levels of performance.
- **Growth targets can guide critical discussions around closing achievement gaps.** Growth targets can encourage teachers to work with colleagues to close achievement gaps across time. Through our work at AIR, we have seen teachers working in vertically aligned grade-level teams, data teams, and professional learning communities using the goal-setting process to develop long-range goals to bring students who perform far below proficiency up to grade level during the course of multiple school years.

What Are the Drawbacks of Growth Targets?

- **Setting rigorous yet realistic growth targets can be challenging.** As mentioned above, setting growth goals is a challenging endeavor. First, growth may be a form of measurement that raises skepticism or concern. Second, although standards may be established, common expectations around "expected growth" (i.e., how much growth on average a student makes in a given course) may not be. Third, trend data, vendor-provided growth targets, and other baseline data may not be available to inform target setting, and when they are available, teachers and principals may struggle to make sense of them. Finally, new standards and assessments add to the complexity by changing learning expectations.
- **Poor pretest and posttest designs can undermine the value of growth targets.** Assessment quality matters regardless of the type of target that a teacher sets, but additional assessment considerations apply for setting growth targets. The assessments given at the beginning of a school year need to have stretch so that teachers can accurately identify students' true starting points. There are major limitations and potential measurement error in pretest and posttest designs, particularly when the same assessment is used for both administrations. Caution is warranted when using pre- and post-tests (see Marion et al., http://www.nciea.org/publication_PDFs/Measurement%20Considerations%20for%20NTSG_052212.pdf).
- **Growth targets may present additional challenges for ensuring comparability across teachers.** Because teachers often develop growth targets for their individual students, ensuring the comparability and rigor of student learning targets across all teachers can be challenging. States and districts can establish various processes to ensure comparability, such as requiring the same assessment and/or training

evaluators on how to approve rigorous student learning targets, but if guidance is not provided, growth targets will vary considerably. If parameters are not set, teachers working in the same subjects and grades may use the same assessments but set targets that are not comparably rigorous.

- **If growth targets are not rigorous and long-term planning does not occur, the lowest performing students may not achieve proficiency.** The focus on growth in these kinds of targets is designed to have students show growth in learning every year to ultimately close achievement gaps. However, if the goals are not rigorous or if long-term planning across teachers of different grade levels does not occur, students may be required to grow across time but never achieve proficiency. For an example of how a student may meet a growth target even though he or she did not achieve proficiency, see the example of Student B in the appendix.
- **Growth target scoring is often more complex.** Because growth scores are often taking into account multiple points of data (e.g., student baseline scores as well as summative scores), the scoring process can require more calculation, which generally does require more time and also leaves more room for error.
- **If growth targets are not rigorous and long-term planning does not occur, the lowest performing students may not achieve proficiency.** If growth targets are not rigorous and long-term planning does not occur, the lowest performing students may not achieve proficiency. Students may grow across time but never achieve proficiency if growth targets are not rigorous or planned as long-term goals. For an example of how a student may meet a growth target even though he or she did not achieve proficiency, see the example of Student B in the appendix.

Conclusion

Ultimately, both proficiency and growth have value in both education policy and the classroom. If students are not proficient in critical knowledge and skills by the time they finish high school, they will not be prepared to enter college or have the skills necessary to enter the workforce. However, if teachers focus solely on moving students toward proficiency, then they may fail to help their highest performing students realize their full potential and devalue the growth that these students may show. Striking a balance between focusing on proficiency and growth can lead to a more nuanced approach.

That said, when states and districts use student learning targets in educator evaluation systems, we strongly encourage that states and districts seriously consider the value of using growth targets. Growth targets better acknowledge teachers' contributions to student learning because they can illustrate growth for each student; even low-performing students may grow significantly but not attain proficiency. Because growth targets measure the change in performance between two points in time, teachers are not penalized for working

with low-performing students, and they also are not given a strong advantage simply for having students who entered a course already proficient. Furthermore, many federal and state initiatives emphasize the use of measures of student growth in teacher evaluation systems.

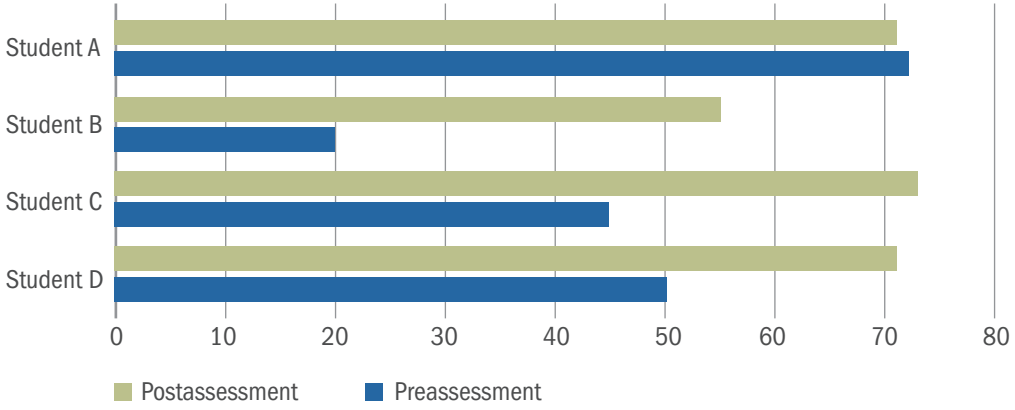
Student learning measures are new to many teacher evaluation systems, and the field will continue to develop best practices across time. In the meantime, states and districts should carefully consider whether one or both types of learning targets best fit their local needs by taking into account the benefits and the drawbacks outlined here.

Regardless of the approach chosen, the target-setting process should emphasize the importance of setting meaningful goals for all students. What do proficiency and mastery look like in the context of the specific learning at hand, and how does that relate to the assessment being used? What does a year's worth of growth look like, and what are rigorous ways of determining that growth? These questions are not always easily answered, but the target-setting process clearly brings them to the surface. Ideally, with these questions, the field will explore and reexamine student expectations, triggering important conversations that ultimately improve student achievement and growth.

Appendix. How the Results of Proficiency and Growth Targets May Differ

The following scenario provides an example of how the results of a teacher's student learning measure may differ based on how the learning targets are constructed. In this scenario, a score of 70 represents proficiency. Figure A-1 displays the results of the preassessment and postassessment scores for four students in a teacher's class.

Figure A-1. Preassessment and Postassessment Results



Let's examine how the results will differ in this example based on whether the teacher set proficiency targets or growth targets. Consider the results comparing the following types of targets:

- **Proficiency target.** All students will score at least 70 on the postassessment.
- **Growth target.** All students will increase their scores by 25 points from the preassessment to the postassessment.

Table A-1 shows the results for the four students in Figure A-1.

Table A-1. Results of Meeting Proficiency and Growth Targets

Student	Preassessment	Postassessment	Difference Between Postassessment and Preassessment	Proficiency Target: Met Proficiency Target of 70?	Growth Target: Met Growth Target of an Increase of 25 Points?
A	71	70	-1	Yes	No
B	20	55	35	No	Yes
C	45	72	27	Yes	Yes
D	50	71	21	Yes	No

The results differed for three of the four students. How can these results be explained?

- Student A's postassessment score was 70, so the student met the proficiency target. However, the student showed negative growth between the two assessments. Therefore, Student A did not meet the growth target.
- Student B's postassessment score was much lower than the proficiency target of 70 and thus did not meet the proficiency target. However, the student showed 35 points of growth, which resulted in the student meeting the growth target.
- Student C's postassessment score slightly exceeded 70, so the student met the proficiency target. The difference between the two assessments was greater than 25, so Student C also met the growth target.
- Student D's postassessment score was greater than 70, so the student met the proficiency target. However, the difference between the two assessments was only 21 points, so the student did not meet the growth target.

Proficiency Target Examples

Rhode Island: Social Studies, Grade 8
http://www.ride.ri.gov/Portals/0/Uploads/Documents/Teachers-and-Administrators-Excellent-Educators/Educator-Evaluation/Student-Learning-Objectives/SLO_MS_SocialStudies_Gr8.pdf

Hawaii: World Languages, Grade 7-8
http://eesteacher.weebly.com/uploads/1/4/0/3/14039000/slo_world_language_grades_7-8_sample_2013-09-23.doc

Maryland: Physical Education, Middle School
http://www.msde.maryland.gov/NR/rdonlyres/2F02A913-FB2E-43D6-8F3D-DC0397B3B38B/34713/PE_Content_Knowledge_MS_r121412_.pdf

Growth Target Examples

New Jersey: Physics I, Grade 9
http://www.state.nj.us/education/AchieveNJ/teacher/Physics.general.tiered%20SGO.pdf

Rhode Island: English Language Arts, Grade 6
http://www.ride.ri.gov/Portals/0/Uploads/Documents/Teachers-and-Administrators-Excellent-Educators/Educator-Evaluation/Student-Learning-Objectives/SLO_MS_ELA_Gr6.pdf

New York: Science, Grade 7
https://www.engageny.org/sites/default/files/resource/attachments/science_7.pdf

Hawaii: Social Studies, Grade 10
http://eesteacher.weebly.com/uploads/1/4/0/3/14039000/slo_social_studies_grade_10_2013-10-09.docx

Hybrid Target Examples Using Both Proficiency and Growth

Rhode Island: Chemistry, Grade 11

http://www.ride.ri.gov/Portals/0/Uploads/Documents/Teachers-and-Administrators-Excellent-Educators/Educator-Evaluation/Student-Learning-Objectives/SLO_HS_Science_Gr11.pdf

Rhode Island: Math, Grade 7

http://www.ride.ri.gov/Portals/0/Uploads/Documents/Teachers-and-Administrators-Excellent-Educators/Educator-Evaluation/Student-Learning-Objectives/SLO_MS_Math_Gr7.pdf

Ohio: Social Studies, Grade 8

http://education.ohio.gov/getattachment/Topics/Teaching/Educator-Evaluation-System/Ohio-s-Teacher-Evaluation-System/Student-Growth-Measures/Student-Learning-Objective-Examples/Student-Learning-Objectives-Social-Studies-Example/3319_OH_SocStudies_Grade8_SLO_Exemplar-FINAL_10-18-13.pdf.aspx

Ohio: American Government, Grade 11

http://education.ohio.gov/getattachment/Topics/Academic-Content-Standards/New-Learning-Standards/Student-Learning-Objective-Examples/Student-Learning-Objectives-Social-Studies-Example/American-Government-Social-Studies-grade-11.pdf.aspx

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