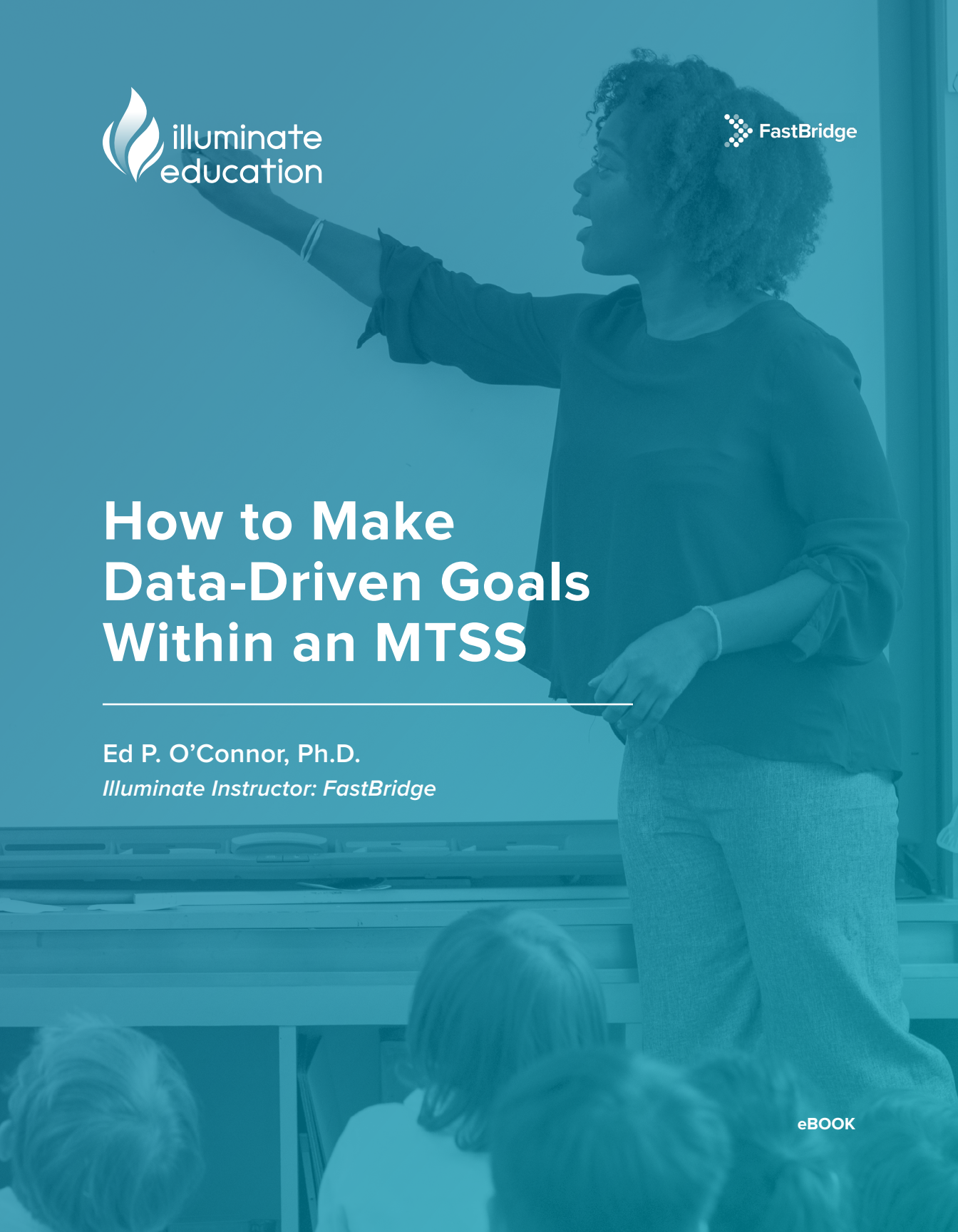

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How to Make Data-Driven Goals Within an MTSS

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eBOOK

CONTENTS

INTRODUCTION

For more than two decades, schools have been working to implement Multi-Tiered System of Supports (MTSS) frameworks for organizing instruction and interventions for all students. MTSS is grounded in the premise that educators must collect data to monitor the effects of instruction and determine when adjustments should be made to better meet students' needs.

Originally, this process was referred to as "Response to Intervention" (RTI) because the framework focused primarily on individual student performance. More recently, the concept of MTSS has emerged with the recognition that systemic structures and routines can contribute substantially to the learning outcomes of all students. Whether the label is MTSS or RTI, the following definition from Burns & VanDerHeyden (2006) reflects the fundamental purpose of these systems:

"The systematic use of assessment data to most efficiently allocate resources to enhance the learning for all children."

In 2020-21, formative assessment and assessment data will play an especially critical role in MTSS. Educators will need this insight to determine the impact of school closures on learning and to set rigorous, yet realistic, goals for student growth and achievement. Assessments will be key in screening individuals and/or groups of students for learning loss in specific skill areas, setting new learning goals, providing data to plan targeted interventions, and monitoring growth.

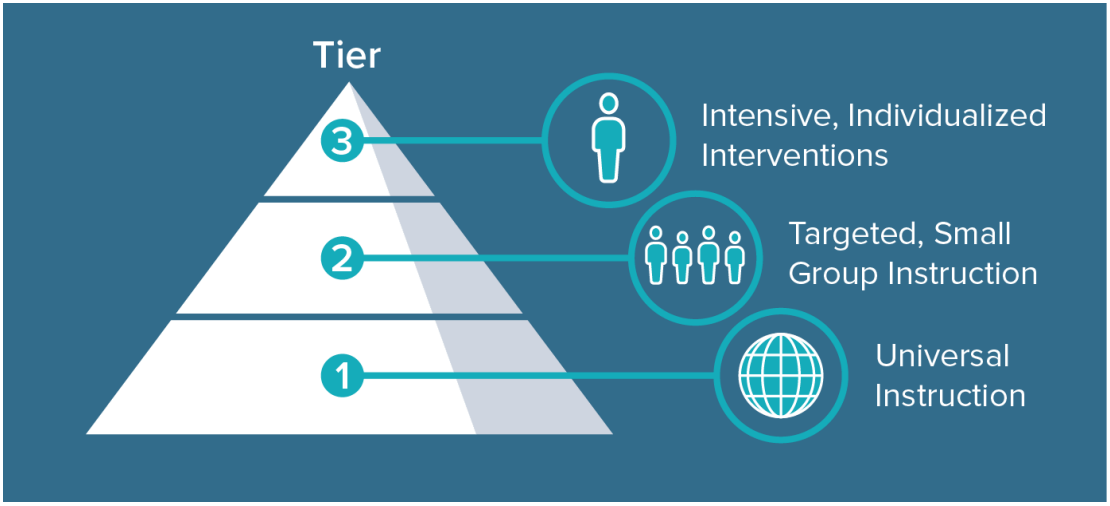
In this whitepaper, you'll learn:

- **The role data plays within an MTSS**
- **Three goal-setting strategies within an MTSS**
- **Four steps for setting goals that can inform instruction and interventions**

Chapter One

SYSTEM DATA: THE FOUNDATION OF MTSS

MTSS describes an educational service delivery model that incorporates an organization structure designed to maximize learning outcomes for all students. Within an MTSS, instructional practices are operationalized as "tiers" of instructional intensity provided to students according to their perceived need. The end goal is to provide the appropriate supports to all students so they are able to reach important learning targets. Most MTSS models define three tiers of support that reflect levels of intensity of instruction along a continuum.



An MTSS relies heavily on student performance data collected at regular intervals to understand the impact of the instructional supports provided to students across the tiers. These data are first reviewed at the system level by teachers and educational leaders to determine if instructional practices provided at Tier 1 to all students result in a majority of students reaching pre-established benchmark targets. When data indicate that large numbers of students are not reaching grade-level learning goals, and/or many students scoring below these skill levels are not demonstrating accelerated growth, adjustments must be made to the instructional content and/or the pedagogical strategies used in the classroom.

The effect of intensified instructional supports provided to students through MTSS must be evaluated on a regular basis to determine effectiveness. Increases in rate of skill acquisition are necessary for students who are demonstrating gaps between their current performance and the benchmark target skills that reflect "on-track" skills. It is important to capture reliable and valid data about student skill acquisition from all students at least three times per year. For students who demonstrate skill deficits and who are receiving additional, intense instruction and intervention at Tiers 2 or 3, more frequent data should be collected — sometimes as often as weekly.

Progress monitoring data are evaluated on a regular basis to determine whether or not the student is making sufficient progress toward grade-level skill. It is at this point that goal setting becomes critical. When progress monitoring data are analyzed for this purpose, the important question becomes:

"Is this student growing their skills at a sufficient rate to predict attainment of grade-level skills over the shortest time frame one could expect?"

To answer this question, you must establish a standard for growth to compare a student's growth to. Without a clear and carefully selected growth target, educators may accept low growth rates as "sufficient," and students may not reach benchmark skills as quickly as they should. In the worst-case scenarios, students might not meet benchmarks at all if the accepted growth is too low. Conversely, if the expected target for growth is set too high, few, if any, students will meet this standard and interventions that are producing robust growth will be considered inadequate.

The challenge for setting standards for growth is that you must use evidence drawn from normative samples and intervention research to select goals that are neither too low nor too high. This level of just-right growth is often referred to as "ambitious but attainable" growth (Good et al., 2015). The remainder of this guide will provide you with information about how to set ambitious but attainable growth goals for students.

Chapter Two

3 TYPES OF GOALS IN MTSS

There are three broad methods for setting goals for student learning.

1. **Norm-referenced goals**
2. **Criterion-referenced goals**
3. **Rate of Improvement (ROI) goals**

Each one is defined by the type of comparison used to establish the performance standard for the goal. Each also answers different questions and has unique strengths and weaknesses.

Norm-Referenced Goals

Norm-referenced goals reflect a student's performance as compared to the performance of a large group or normative sample of other students who share an important characteristic, such as grade level. Student scores are generally translated as percentile ranks to indicate the relative standing of a particular score with respect to all other scores observed in the norm sample. Percentile ranks identify the percent of students from the norm sample who achieved the same or lower score as the observed score. In other words, percentiles tell you approximately how many scores in the norm sample were below the observed score.

When to Use Norm-Referenced Goals

Norm-referenced scores and goals are generally most valuable when the questions of interest are about broad range relative outcomes that might reflect "typical" performance or "low," "on-track" or "high" skills. Norm-referenced goals can be useful targets for moving individuals or groups of students toward a desired range of scores.

Strengths and/or Weaknesses

Norm-referenced goals are generally easy to interpret and the percentile scores and category labels are often familiar to most people. Setting goals to increase average percentile rank outcomes for groups of students or for increasing the number of students who exceed a specific percentile rank score can be useful as broad targets for school improvement plans.

On the other hand, norm-referenced goals can be deceiving if the norm sample is not well matched to the students being assessed. Further, norm-referenced goals can result in oversimplified interpretations. For example, it is common practice to use the label "average range" for scores between the 25th and 75th percentile. While being in the average range can seem like a positive outcome, it is often the case that students scoring at or near the 25th percentile are considered "at-risk."

Criterion-Referenced Goals

Criterion-referenced goals use a pre-determined "cut score" as a reference point against which student scores are compared. These cut scores or criterion targets are usually established through a statistical analysis of scores obtained from large samples of students on two measures, such as an assessment and standardized test.

When to Use Criterion-Referenced Goals

Criterion-referenced goals can let you know where students need to be in their learning at a specific point in the school year. They also are predictive of performance on standardized tests. In the description above, the standardized test functions as the "gold standard" that reflects a generally agreed upon level of proficiency. The criterion target score is then set based upon a statistical analysis of the observed probability of students earning a score on the comprehensive test given a particular score on an assessment. These criterion target scores then represent a target score that, when achieved, indicates a high probability (e.g. 80%) that the student obtaining that score will achieve a desired score on the comprehensive skill test.

Strengths and/or Weaknesses

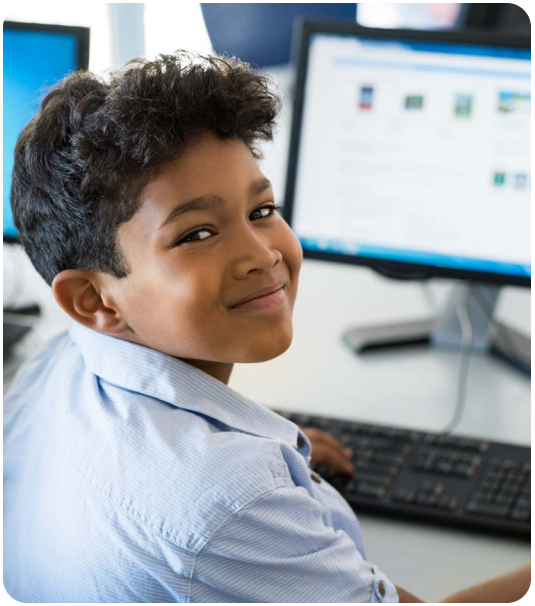
Criterion-referenced goals or targets have the advantage of being statistically determined to predict specific outcomes of importance. Because they reflect the specific skill levels to target with instruction and interventions, these goals are less likely to be misinterpreted and more practically relevant. Criterion-referenced scores also are useful for evaluating the status of groups of students, such as a class or grade level, as it is easy to determine the number and percentage of students in a group who do or do not achieve a criterion target score.

Rate of Improvement (ROI) Goals

ROI goals are sometimes called “growth goals” because they focus on growth in student scores over time. In this case, the emphasis is not on a single score outcome, but rather the pattern of scores achieved over time. Thus, the goals established with this perspective target specific ROIs in scores that can be represented in terms of “gains” per unit of time. When assessing ROI, the content of each assessment administered in a sequence must be substantially the same level of difficulty as all of the others. This requirement allows for interpretations of growth to be attributed to actual changes in student skills rather than differences in assessment difficulty.

When to Use ROI Goals

ROI goals are useful in tracking student improvement. These goals identify where a student is at and where they need to be in a specific amount of time. With this in mind, you can measure and monitor a student’s growth toward that end goal to ensure they are on track. And if they aren’t, you can make adjustments to instruction or interventions to get them back on track.



Strengths and/or Weaknesses

Establishing a target ROI that is meaningful but possible to attain can be challenging. For students who are behind their peers in one or more skill domains, achieving the same (typical) growth compared to peers will not be sufficient. Even at typical growth, skill deficits will remain. For this reason, students who are demonstrating skill deficits must have a growth goal with an ambitious ROI that exceeds typical growth. This is the only way to close skill gaps over time.

But be careful. Setting goals that reflect an impossible to attain standard can have several negative effects. At a minimum, it can result in frustration for students, teachers and parents. Beyond that, when determination of intervention quality is based upon meeting or not meeting these growth goals, establishing an unreachable goal can lead to unwarranted discontinuation or change in intervention and/or inappropriate placement of students in specialized programming.

Chapter Three

4 STEPS FOR SETTING GROWTH GOALS

Once students have been selected for additional intervention and progress monitoring, and a progress monitoring measure has been selected, a specific growth goal can be set following these four steps.

1. **Determine a starting point for the goal line.**
2. **Determine the collection frequency of ongoing progress monitoring.**
3. **Select an ROI that reflects an ambitious but attainable pace for growth.**
4. **Calculate the end-point goal score and render the goal line.**

Step 1: Determine a starting point for the goal line.

If the measure selected for progress monitoring was administered as part of the benchmark screening, the benchmark screening score can generally be used as the starting point so long as this score is judged to be a reasonable representation of a student's skills. If the benchmark score was attained up to three weeks prior to the date of starting intervention, or if there are other reasons to suspect the benchmark score is not an accurate representation of the student's skill, additional data must be collected to establish an accurate and stable start score for the goal line. If the selected progress monitoring measure was not administered as part of the benchmark screening, one or more baseline scores must be collected using the selected progress monitoring assessment prior to establishing growth goals.

Step 2: Determine the collection frequency of ongoing progress monitoring.

The rule of thumb is that students with the largest skill deficits should be monitored most frequently. Most experts recommend weekly progress monitoring for students whose scores are below the 15th percentile. These students will likely need the most intensive supports, in addition to core instruction, to ensure that they achieve accelerated growth. Frequent progress monitoring is necessary to determine whether a student's progress is "on-track."

Step 3: Select an ROI that reflects an ambitious but attainable pace for growth.

The desired ROI can be based upon ROIs observed for other similar students if these growth norm data are available. Most published progress monitoring tools offer student growth norm data that can be used for this purpose. For students who are at or near benchmark scores, growth rates at or near the 50th percentile rank should be sufficient to ensure that these students remain "on-track" and keep pace with their peers. However, for students selected for additional instructional support and progress monitoring, ROI must be above the 50th percentile to produce gap-closing outcomes. Because ROI goals are intended to be "ambitious, but attainable," it is recommended that they be set at or near the 80th percentile of observed growth.

Step 4: Calculate the end-point goal score and render the goal line.

To calculate the end-point score target, select a timeline for goal attainment. The timeline must be equal to the frequency of progress monitoring so that the goal ROI can be matched in terms of units of time (e.g. weekly, bi-weekly, monthly). The goal end-point date is frequently selected to align with typical transition points in the school calendar, such as semester end points or end of school year.

Once an end-point date is selected, the actual score can be calculated by multiplying the selected ROI (e.g. number correct gained per week) by the number of weeks between the goal start and end points.

With the start and end scores for the goal established, the actual goal line can be rendered by connecting the start score with the goal score. This line becomes the comparison against which all progress monitoring data will be compared to determine if desired progress is being made.

Chapter Four

THE IMPORTANCE OF GROWTH GOALS

Tracking growth is an important routine for monitoring the impact of supplemental supports in an MTSS. When students are significantly below criterion- or norm-referenced targets, high-strength intervention applied over an extended period of time is necessary to produce sufficient growth. Because criterion- and norm-referenced goals emphasize a specific level of performance as a goal, it may not be realistic to expect students to meet this level of performance in the allocated time. Even when effective instruction produces significant growth, it may not fully close the skills gap when students are far below desired performance levels.

Under these circumstances, criterion-based and norm-based goals may lead to erroneous conclusions that instruction or intervention is not effective. For this reason, goals focused on growth or ROI are often critical to include for understanding the impact of instruction or intervention. The challenge is figuring out how much growth to expect or what amount of growth is necessary to achieve to conclude that the student is accelerating at a rate that reflects “good” growth.

Goal setting also is required by the Every Student Succeeds Act (ESSA). Many state ESSA plans include requirements that schools and teachers develop specific, data-based Student Learning Objectives (SLOs). These SLOs are generally focused on improving outcomes for vulnerable student groups that traditionally demonstrate less successful learning outcomes. SLOs that use ROI as a focus for target goals can be important for helping schools monitor the impact of instruction and intervention for these at-risk students.

SUMMARY

MTSS is used in schools to support students in achieving important learning benchmarks by providing access to instruction or intervention matched to student needs. The use of data that reflect the level of student skills and ROI over time is a hallmark of high-quality MTSS. In addition, specific learning targets or goals are used as references against which student progress is measured to determine the effectiveness of instruction or interventions.

Goals for student learning can be set based upon normative comparisons. These are called norm-referenced goals. Or, student performance can be evaluated against scientifically established targets to predict performance on state assessments. These are referred to as criterion-referenced goals. Finally, you can establish growth goals that provide information about changes in student learning over time (ROI). These ROI goals are especially critical for monitoring whether instruction and interventions are closing students' skill deficits.

The process of systematically collecting data about student skills and assessing it against key targets is a critical factor to guide the selection, delivery and adjustment of instruction and interventions. The FastBridge assessment system is the only system to deliver educators screening and progress monitoring data around reading, math and social-emotional behavior in a single, integrated system. FastBridge not only delivers reliable data, it also helps educators apply it with confidence through insightful reporting, expert data analysis and built-in assessment and instruction coaching.

Contact FastBridge to talk to a representative and demo the system.

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