Hammill Institute on Disabilities

Beyond Behavior
2023, Vol. 32(1) 15–23

DOI: 10.1177/10742956221143112
journals.sagepub.com/home/bbx
SAGE

Assessment for Effective Screening and Progress Monitoring of Social and Emotional Learning Skills

Marissa J. Filderman, PhD[1], Clark McKown, PhD[2], Pamela Bailey, MA[1], Gregory J. Benner, PhD[1], and Keith Smolkowski, PhD[3]

Abstract

The collection of student data through screening and progress monitoring of social and emotional learning (SEL) skills is just as important as the implementation of curriculum and practices. Monitoring skill acquisition allows teachers to identify effective practices, provide intervention, and intensify support for students who need it. In this article, we provide a practical demonstration of how to make instructional decisions based on screening and progress monitoring of student SEL skill acquisition.

Keywords

social and emotional learning, screening, progress monitoring, emotional and behavioral disorders

Student screening and progress monitoring data have become widely deployed educational practices in general and special education classrooms. Data use is particularly important for special education teachers, as a 2017 Supreme Court ruling (*Endrew F. v. Douglas County School District*, 2017) determined that "reasonably calculated" appropriate progress unique to each child with disabilities must be made, increasing the urgency of systematic progress monitoring. In response to evolving policy and practice imperatives, research (e.g., Ardoin et al., 2013) and guidance (e.g., National Center for Intensive Intervention [NCII], 2013) on the effective applications of academic progress monitoring have emerged.

As a result, in academic subject areas, educators have reasonably sound tools to screen children who may have difficulties and monitor the progress of students who are receiving intensive support beyond general education instruction (NCII, 2013). Although functional behavior analysis has been available for the most intensive students for years, the use of progress monitoring data for behavioral decision-making remains an area in need of further research and guidance (Bruhn & McDaniel, 2021). Recently, Bruhn and colleagues (2018) provided a step-by-step guide to data-based decision-making related to behavioral intervention. Such guidance has not yet been described for social and emotional learning (SEL) interventions (McKown, 2019; Soland et al., 2022).

In contrast to the problem-solving approach of behavioral intervention, SEL provides explicit instruction to support the development of a discrete set of skills that helps students engage in age-appropriate and socially acceptable behaviors (i.e., self-awareness, self-management, responsible decision-making, social awareness, and relationship skills; Weissberg et al., 2013). SEL instruction is linked to positive academic, behavioral, and mental health outcomes for students (Corcoran et al., 2018; Korpershoek et al., 2016). Students who receive SEL intervention have improved academic performance (Bavarian et al., 2013), SEL skills and attitudes (Brackett et al., 2012), and behavior (Portnow et al., 2015). As SEL instruction builds this unique set of skills, corresponding measures, goals, and guidelines are necessary (McKown & Herman, 2020). Accordingly, in the present article, we provide steps for data use for SEL within the context of multitiered systems of support (MTSS). Specifically, we describe how to use (a) screening data to identify at-risk students in need of Tier 2 intervention and (b) progress monitoring data to make data-based decisions on when and how to provide intensive, individualized Tier 3 intervention for students who do not respond to Tier 2 intervention. We provide a hypothetical case study throughout to illustrate each of the steps discussed.

[1]The University of Alabama, Tuscaloosa, USA
[2]Rush University Medical Center, Skokie, IL, USA
[3]Oregon Research Institute, Eugene, USA

Corresponding Author:
Marissa J. Filderman, College of Education, The University of Alabama, Box 870232, Tuscaloosa, AL 35487, USA.
Email: mjfilderman@ua.edu

Using Screening Data to Identify At-Risk Students

Within the context of MTSS in general (i.e., academic and behavioral interventions of increasing intensity), all students in the classroom receive Tier 1 instruction or the core curriculum. While receiving Tier 1 instruction, all students are screened. Some of those students are identified as being at risk of not meeting end-of-year goals without instructional change, indicating a need for targeted Tier 2 intervention delivered in small group formats. In academic content areas, students are typically administered brief screening measures that directly assess a broad scope of component skills at the beginning, middle, and end of year. Students are flagged as being at risk if they perform below a certain level that is based on a predetermined benchmark goal. Behavioral screening, while not as prevalent as academic screening, involves choosing a brief measure of behavior and determining a threshold for student risk.

Screening for SEL skill development is not yet common practice, however (McKown, 2019). Aligned with MTSS for academics, the purpose of SEL screening is to determine students who have underdeveloped SEL skills based on their developmental level. Like MTSS for behavior, determining the risk of SEL requires procedures that include selecting a tool that will provide the necessary information and determining a threshold for student risk.

Step 1: Select a Tool

To screen students for risk, a measurement tool must first be selected. Table 1 describes several types of assessment that may be used for SEL screening. Direct assessment is one way to determine a student's SEL competence. Students may be directly assessed on their skills based on responses to hypothetical scenarios and their interaction with tasks (e.g., SELweb; McKown et al., 2016; Russo et al., 2019). Self-rating is another way in which students may be assessed. Students may rate the frequency or the amount to which they agree with a statement related to an SEL behavior, value, attitude, or belief (e.g., Devereaux Student Strengths Assessment; LeBuffe et al., 2009). Finally, teacher and/or parent rating scales may be used as screeners to evaluate student SEL competence. With these assessments, teachers and/or parents rate students based on a discrete set of observable skills (e.g., Social Skills Improvement System Rating Scale [SSIS]; Gresham & Elliott, 2008). Some assessments also allow for the triangulation of data from the teacher, parent, and student (e.g., SSIS).

To select an appropriate tool for screening, there are several considerations to keep in mind. One important consideration is the developmental level of your students. For students at a lower developmental level (i.e., below Grade 3), self-ratings may not be appropriate as the ability to evaluate one's own competence relies on self-awareness skills that students may not yet readily possess (McKown, 2019). In addition, consideration of whether triangulation of data gathered from various perspectives (i.e., teacher, parent, student) may provide a better understanding compared with one source alone is warranted.

Developmental level is an important consideration when considering whether student-level data are obtainable. There are also instances where parent data may not provide the information needed. For example, a student may only interact with peers in the school setting. In this case, parent ratings may not provide information that can be used to determine student risk in this area. Finally, if a student exhibits behavior in one class and not others, it may not be necessary to gather data from teachers who do not observe the student's behaviors. Teacher rating and direct assessment may be used across developmental levels and selected based on the student's grade and age level, but some students may still require additional adaptations to the format of the assessment or responses to obtain reliable information. A final consideration is the student populations and contexts in which the screener has been tested. This information, provided by the assessment developer or in the assessment manual, is essential to have confidence that the screener is valid for the students and context in which you teach, particularly when taking into consideration differences in responses and behaviors based on cultural norms.

Step 2: Determine a Threshold for Student Risk

Once a tool is selected, a threshold must be selected to determine whether the student has under-developed SEL skills and is therefore in need of intervention. Often, score reports from the measurement tool will indicate students who may be at risk based on their scores. If these are not provided, thresholds determined by a school-based team may be norm-referenced or criterion-referenced. Norm-referenced goals compare the performance of a large population of students (i.e., the normative performance) to a specific student to determine how far that student deviates from the norm (i.e., standard deviation). Normative data that report the necessary descriptive information (i.e., national average and standard deviation) can often be located on the tool's website or on a website that compiles such tools (e.g., intensiveintervention.org).

For norm-referenced goals, thresholds may be set by deciding how far below the normative performance, in standard deviations, that further investigation of the child's needs is triggered. Students who score one or two standard deviations below the normative performance score may be considered as being at risk. This threshold may be decided based on school considerations (e.g., how much support is available for students, initiatives in place to support student SEL, and the intensity of school SEL needs), and/or

Table 1. Social and Emotional Learning Assessment Tools.

Measure	CASEL competencies included	Respondent	Grade	Format	Cost	Advantages
SELweb (McKown et al., 2016) xsel-labs.com	Self-Management, Responsible Decision-Making, Self-Awareness, Relationship Skills, and Social Awareness	Student	K–3	Digital	5000 elementary students, $4 per student Includes professional development, data workshops, single-sign-on and auto-rostering capabilities	Scores are calculated automatically No credentials required Overall SEL comprehension Four subscores Used as a screener and progress monitor
ESBA (Pennefather & Smolkowski, 2015) Email authors	Self-Management, Responsible Decision-Making, Self-Awareness, Relationship Skills, and Social Awareness	Teacher	K–6	Digital	Fee Determined by the Developer	12 items using a teacher-observation based rating scale
DESSA (LaBuffe et al., 2009) apertureed.com	Self-Management, Responsible Decision-Making, Self-Awareness, Relationship Skills, and Social Awareness	Parents/guardian, teachers, or staff at schools and child-serving agencies, including after-school, social service, and mental health programs	K–8	Digital and Manual	Fee Determined by the Developer	Ten minutes or less to administer No credentials required to administer
DESSA-Mini (Naglier et al., 2011) apertureed.com	Self-Management, Responsible Decision-Making, Self-Awareness, Relationship Skills, and Social Awareness	Parents/guardian, teachers, or staff at schools and child-serving agencies, including after-school, social service, and mental health programs	K–8	Digital and Manual	Fee Determined by the Developer	1 min to administer No credentials required to administering Scoring manual for manual scoring Online scoring service is provided by the assessment developers
SSIS Rating Scale (Graham & Elliott, 2008) pearsonclinical.com	Self-Management, Responsible Decision-Making, Self-Awareness, Relationship Skills, and Social Awareness	Parent, Teacher, Student	Ages 3–18	Digital and Manual	Fee Determined by the Developer	Provides detailed individual reports and intervention recommendations Useful for Tier 3 and special education assessments 25 min to complete
SSIS-SEL (Graham & Elliott, 2008) pearsonclinical.com	Self-Awareness, Self-Management, Social awareness, Relationship Skills, Responsible Decision-Making,	Parent, Teacher, Student	PreK–12	Digital and Manual	Fee Determined by the Developer	Overall composite score and six subscores Scoring can be done manually or with software Narrative report includes intervention planning recommendations to improve SEL competencies Part of a comprehensive system that includes Tier 2 and Tier 3 interventions and classroom instructional materials
Tripod SEL-C (Tripod Education Partners, 2018) tripoded.com/surveys	Self-Management, Responsible Decision-Making, Self-Awareness, Relationship Skills, and Social Awareness	Student	3rd–5th and 6th–12th	Digital	Fee Determined by the Developer	Optional SEL competencies can be added 10–15 min to administer
DAP (Search Institute, 2016) search-institute.org	Self-Management, Responsible Decision-Making, Self-Awareness, Relationship Skills, and Social Awareness	Student	Ages 8–18	Digital	Site report is $250 for up to 100 surveys. Each additional survey beyond included 100 is $2 per survey.	10 min administration time No credentials to administer Score reports include narrative information on areas of strength and growth Identification of levels as challenged, vulnerable, adequate, or thriving Digital online scoring provided
DSECS-S (Mantz et al., 2018) wh1.oet.udel.edu	Responsible Decision-Making, Relationship Skills, Self-management, and Social Awareness	Student takes assessment digitally and is scored automatically	3rd–12th	Digital	Free	16 items Free to use Scored automatically No training required prior to administering

Note. Adapted from Access Assessment Guide, Collaborative for Academic, Social, and Emotional Learning (CASEL), SSIS, & RAND. The Assessment Work Group (2019) and CASEL (https://casel.org) are helpful resources for further reading on available progress monitoring tools for social and emotional learning (SEL) skills. ESBA = elementary social behavior assessment; DESSA = Devereaux Student Strengths Assessment; SSIS = Social Skills Improvement System; DSECS-S = Delaware Emotional Competency Scale; DAP = Developmental Assets Profile.

individual considerations (e.g., student characteristics that may influence performance on assessment).

Some SEL assessments may not have data available to determine a normative set of scores. In this case, we suggest a criterion-referenced goal, wherein the raw score may be used to set a criterion for student performance based on what the team deems appropriate. Although this approach is more subjective, it may be necessary depending on the assessments available to the team. In this case, we suggest considering the distribution of scores within the school, as well as the capacity to serve students, to determine an appropriate threshold. For example, schools with more support staff and wide distribution of scores may be able to set a higher threshold than schools with less support staff and a narrower distribution of scores.

After settling into a new school year, Mr. Baker, an early elementary general education teacher in an inclusive classroom, administered a screener to determine whether there were students in his class struggling with SEL skills. He chose to administer a direct assessment of students' skills (i.e., SELweb) because (a) he was working with younger students and did not think that a self-rating assessment would provide useful data and (b) the direct assessment had been tested with students in his grade level. Mr. Baker made sure to provide accommodations for students who needed them and considered whether adaptations would be necessary for students not identified with a disability on a case-by-case basis.

In determining a risk threshold, Mr. Baker chose to set a norm-referenced goal of two standard deviations below the norm even though a recommendation of student risk was included in the assessment report. His choice of a norm-referenced goal came because he was cognizant of the limited time and resources he believed were available to intervene with at-risk students at his school. He also reviewed the score report provided to him as part of the assessment package. Based on the results of screening, a student in his first-grade homeroom and reading class, Katherine, was considered to be at risk for difficulties with SEL skills.

Mr. Baker set up a meeting to voice his concerns with a collaborative data team that included Katherine's parents, the first-grade math teacher, the special education teacher, the school counselor, and the school social worker. Mr. Baker shared the results of the screening data and his anecdotal observations that Katherine was very quiet in his class, had difficulty making friends, and was not participating in classroom assignments. He wondered whether Katherine may require additional support in these areas.

Katherine's math teacher affirmed that she had also observed Katherine acting withdrawn. She also noted that whenever she assigned Katherine to work with a partner on her assignments, Katherine refused to comply and would remain in her seat working independently. The special educator, Ms. Chapelwhite, wondered whether there could be an underlying challenge, such as an emotional and behavioral disorder, leading to Katherine's withdrawn and noncompliant behaviors. The team began to implement a targeted Tier 2 intervention to support Katherine's SEL skill development.

Using Progress-Monitoring Data for Decision-Making

While a student receives their targeted Tier 2 intervention, it is necessary to monitor their progress to determine whether the intervention is addressing the identified concerns. There are several steps that must be followed to make a systematic decision on whether a student is responding adequately to the selected intervention over time. Steps to monitor student progress include the following: (a) selecting a tool, (b) gathering baseline data, (c) determining the frequency and duration of progress monitoring, (d) setting a goal, (e) analyzing the data, and (f) administering diagnostic assessment as needed (NCII, 2013). Steps 1 and 2 provide preparation for progress monitoring. Steps 3-5 address goal setting and analyzing progress. Step 6 highlights intensification efforts.

Step 1: Select a Tool

In academic progress monitoring, curriculum-based measurement was developed to track progress in global skill domains over time (Deno, 1985; NCII, 2013). Other tools, such as direct behavior ratings and systematic direct observation, may be used to track behavioral progress over time (Bruhn et al., 2018). Likewise, tools have been developed for progress monitoring of SEL skills.

To select a tool for an individual student, the most important considerations are the student's developmental level, alignment between SEL skills covered in the intervention and the SEL skills measured by the tool, and assessment format. Given those considerations, select a tool aligned with your student's developmental level, that measures the skills targeted in the intervention, with a format that allows for an accurate representation of the student's skills (see Table 1). Other considerations include the cost, whether the scores are consistent or variable over time, and training and personnel required to administer the assessment.

Step 2: Gather Baseline Data

Once a tool is selected, gather baseline data with the measure being used to monitor progress so that a goal may be set based on the student's present level of performance prior to intervention onset. For behavior and SEL skills, more data may be needed to establish a trend. For instance, a student might need to be observed at a variety of times, across

various days, with different teachers, with different classroom activities, and/or in different subjects. Student data may be variable depending on the context in which the student is engaged. The median score across baseline data points may be used as an indicator of the student's baseline score across contexts regardless of the variability observed in the data. We recommend gathering a minimum of three baseline data points to establish the student's baseline performance in line with academic recommendations (Stecker & Lembke, 2011).

The team knew that they would need progress monitoring data to support their decision-making while implementing a Tier 2 general SEL curriculum. Although the team was familiar with behavioral assessments, they were unsure how to monitor progress related to SEL skill acquisition. To fill this gap in their knowledge, Ms. Chapelwhite volunteered to investigate SEL assessments that may be available to support their decision-making. Ms. Chapelwhite located a list of SEL measures discussed by the Assessment Work Group (2019) and created a table to identify key features of the assessments such as competency measured, the format of the assessment, respondent, grade level, and advantages unique to the assessment (see Table 1).

Ms. Chapelwhite chose to use a measure with a rating scale because the scores were more consistent across time and therefore trends in Katherine's progress would be more apparent. She also chose a teacher rating scale because self-rating scales were not developmentally appropriate for early elementary students. She reviewed the available tools, considered her needs, considered the intervention being implemented, and decided to use the Elementary Social Behavior Assessment (ESBA; Pennefather & Smolkowski, 2015) as it would provide data on Katherine's progress across skill domains targeted in her Tier 2 small-group intervention. Once the decision was made, she conducted the ESBA three times based on her observations of Katherine in her classroom settings over the course of a week.

Step 3: Determine Frequency and Duration of Data Collection

After baseline data are gathered and intervention has been implemented, decide how frequently to gather data and the duration of time after which you will make decisions. There are several factors to consider in determining the frequency of data collection. The setting in which the student struggles may be an important consideration for how often to collect data. For example, the team may decide to observe the student each Wednesday as the student appears to particularly struggle with the early release schedule on that day of the week. If the student has highly variable behaviors—that is, if their behaviors are unpredictable and change often throughout the course of the day—it may be worthwhile to collect data more frequently over a longer duration to establish a clear trend. On the other hand, if the student demonstrates consistent behaviors, it may be feasible to collect less data. With these considerations in mind, we recommend gathering data over the course of at least 6 weeks, with data collected at least once per week, again in line with academic progress monitoring (Ardoin et al., 2013; Filderman & Barnard-Brak, 2021; Filderman & Toste, 2018).

Step 4: Set a Goal

Although there are clear, research-based goals for many forms of academic progress monitoring, particularly with curriculum-based measurement, the evidence base for behavioral progress monitoring is not yet fully developed (Bruhn et al., 2018). Despite this, we can make recommendations based on the available tools and best available evidence. At the same time, we encourage more research on this very important topic as MTSS continues to integrate academics and behavior in the lens of the "whole child."

When setting a goal for a student receiving an intervention, it is essential to consider their individual growth over time. The screening thresholds that were used to determine whether the intervention was needed would not be appropriate to use alone to determine ongoing need, as students who performed well below the threshold may make progress and still be below the designated risk threshold after the determined duration. That is not to say that these scores may not be considered a part of decision-making. For instance, a student may score below the risk threshold but have demonstrated growth over time. That student should still receive intervention as a result of being below the threshold but may demonstrate a response that suggests continuation on the current track or progression to a new skillset.

Research on expected levels of growth for SEL is emerging. Thus, we provide recommendations to navigate this research as it continues to evolve in order to set goals based on (a) standardized rates of growth and (b) individual pre- and post-test scores. First, we point to research conducted by Soland and colleagues (2022), which lists benchmark gains for a large sample of students in Grades 4 through 12 who self-reported their SEL skills. Gains across school years for SEL were notedly variable, ranging from −0.33 to 0.23 pooled standard deviations depending on the grade level and component skills measured. However, gains across grades more typically were observed to hover around 0.1 standard deviations above or below zero, where zero represents the average score.

Thus, we recommend a 0.1 standard deviation yearly increase in self-reported SEL skills across grade levels for students receiving intervention for a mean score of zero. The corresponding raw score will then need to be calculated based on the measure being used, the scoring system, and

the time frame. For example, for standardized assessments with an average score of 100 and a standard deviation of 15, we would expect an average student to make a gain of 1.5 points across the course of the school year. Across 6 weeks of a 36-week school year, we would expect the student to make 0.25 points gain ([1.5/36] × 6). For nonstandardized assessments, the expected rate of growth may be calculated based on the normative scores reported in the manual or articles about the measure.

Alternatively, expected rates of growth may be determined using pre- and post-test scores for students receiving intervention as reported in studies that use the measure. For example, for the ESBA, a three-point rating scale ranging from 1 (*cause for concern*) to 3 (*skill mastered*), growth of 0.2 points at the end of 6 weeks of intervention may be considered a reasonable goal based on scores reported in the validation study (i.e., students in the study sample who received intervention improved from a mean of 2.46 at pre-test to 2.74 at post-test; Pennefather & Smolkowski, 2015; Walker et al., 2015). Duration of monitoring needs to be considered using this method as well. Specifically, the observed growth may be divided by the number of weeks between pre- and post-testing to obtain a weekly growth rate that may be used for goal setting with the selected intervention duration.

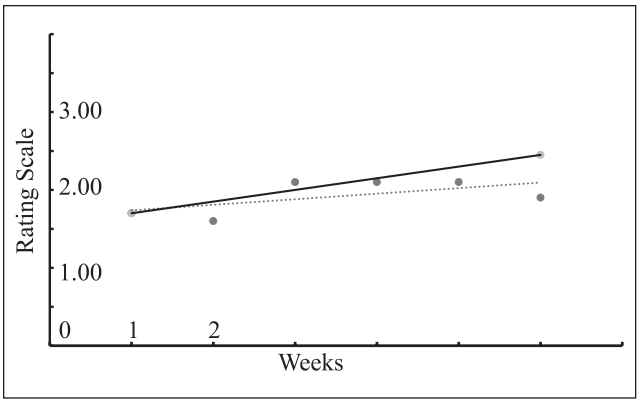

Figure 1. Progress-monitoring graph with 3-point rating scale.
Note. The *y*-axis represents points on the rating scale. Based on the expected progress, the scale has been expanded so that progress may be visually interpreted. The *x*-axis represents the weeks of progress monitoring data collected. The first data point is the baseline data point. Based on this data point, an improvement of 0.2 points on the rating scale may be expected after 6 weeks. The solid line represents the expected slope, or the students' expected progress from baseline to goal. The dotted line represents the trend line based on the student's progress, or the observed slope. In this example, the observed slope is less steep than the expected slope. The student is making progress, but not at the expected rate. Thus, the student requires more intensive intervention. A diagnostic assessment or analysis of subtest data may help the teacher to determine what skills to address to intensify the intervention.

Step 5: Graph and Analyze the Data

There are several options that may be considered for analyzing the gathered data. As mentioned, a static goal may compare the student's current score to their past score to determine whether a student meets a certain threshold. This may be a helpful step in the data evaluation process, but it is not the only step. Student growth over time must also be considered in the context of their individual progress.

Data may be analyzed using a graph in which the y-axis represents the scale of the measure, while the *x*-axis represents the weeks of the intervention or assessment administrations. The scale will be important as the tools are quite variable for SEL progress monitoring. For instance, in Figure 1, we present a rating scale that ranges from 0 to 3 and thus requires smaller increments between points to observe growth over time. A scale measured in standard scores will require larger increments between points to visualize all the data gathered.

To create this graph, plot the median of the baseline data points and the calculated goal point, with a line connecting the two points. This will represent the expected slope. Then, plot each of the student's scores according to the week or administration of the assessment. Based on familiarity with technology, you may choose to draw a line of best fit through the collected data by hand, or the slope may be calculated using computer software such as Microsoft Excel (see Dixon et al., 2009 for specific guidance on Excel for graph construction). This will represent the student's observed slope.

Now you may compare the student's observed slope to their expected slope. One method to do so is the slope method. Using this method, if the student's observed slope is level with or steeper than their expected slope, they are making an adequate response to the intervention. If the observed slope is less steep or trending in the opposite direction, then the student is not responding adequately to the intervention in place and requires adjustments (Stecker & Lembke, 2011). An alternative method, the points below method, allows teachers to observe the final three data points. If these data are below the expected slope, the student is not demonstrating adequate progress. If the points are above or above and below the expected slope, the student is demonstrating adequate progress. Although less rigorous than the slope method (Ardoin et al., 2013), this method may be useful because it may be easier, more time efficient, and students may be able to monitor their own progress.

You may also choose to incorporate both a static and a dynamic goal. For example, if using both a threshold and rate of progress, a student may "graduate" from an intervention if they are above the threshold and their observed slope is steeper than their expected slope. A student may continue intervention if they are making adequate progress based on their observed slope but are still below a threshold for risk. Finally, you may need to intensify intervention further if the

student is below the threshold for risk and also not making adequate progress based on their observed slope. These decisions will be based on the careful selection of criteria determined prior to intervention implementation.

Ms. Chapelwhite decided to collect data once per week over the course of 6 weeks as a starting point based on her understanding of academic progress monitoring. Ms. Chapelwhite expected to see a shift of 0.2 points over the selected duration based on the article she located about her chosen progress monitoring tool, the ESBA. She then calculated a goal by adding 0.2 to Katherine's baseline score of 2.3. At the end of the 6 weeks, Katherine should be rated at 2.5. While implementing the intervention, Ms. Chapelwhite prepared a graph on the computer by plotting the axes, baseline point, goal point, and ongoing weekly data collection (see Figure 1). She connected Katherine's baseline score to the goal point to create an expected slope. After 6 weeks of gathering and plotting data week by week, she reviewed Katherine's data as a whole and calculated a trend line through the data. She noted that the observed slope was less steep than the expected slope, indicating a need for further intervention intensification.

Step 6: Administer Diagnostic Assessment

If you determine that the student did not respond to the intervention adequately, the next step is to use data to pinpoint areas of strength and need. Due to the breadth of skills covered by some screening and progress-monitoring assessments, it is possible that some of these tools may also be used to determine areas of strength and need. Some additional information gathering may also be necessary to determine the areas in which the student struggles.

To select a tool for this purpose, consider the construct and scope of skills measured. For example, for the ESBA teachers rate students' engagement on 12 items: (a) listens to and respects the teacher, (b) follows teacher directions, (c) works with effort, (d) does seatwork as directed, (e) asks for help appropriately, (f) follows classroom rules, (g) avoids breaking rules even when encouraged by a peer, (h) behaves appropriately outside the classroom, (i) works out strong feelings appropriately, (j) has calm conversations without becoming hostile, (k) gets along with peers, and (l) resolves peer conflicts adequately without a teacher (Pennefather & Smolkowski, 2015). Because social skills that influence academic achievement are the construct being measured, this tool may be best used with students who demonstrate challenges in the classroom context. Because a variety of skills related to this context are covered, student performance on the subtests provides the necessary data to target intervention.

To determine areas in which students need additional support, norm-based or criterion-referenced thresholds on subtests or categories of questions may be set, or areas of need may be determined based on comparisons of the student's performance on each of the subtests to determine relative areas of strength and need. Based on student scores, you may decide on an area to begin targeting with research- or evidence-based intervention. For example, a teacher may decide to work on the skill of *listening* if the student scores below a predetermined threshold on a related subtest, or if this is the area where the student demonstrates the most need for support compared with other areas. It is also important to consider data triangulation at this stage—that is, gathering data from multiple sources to gain more holistic insight. For example, you may want to obtain ratings from other stakeholders such as specific content-area teachers, parents, and school counselors. Once you determine the specific area of need, you may intensify the intervention further to meet your student's specific needs.

Ms. Chapelwhite then set about gathering diagnostic data. She reviewed the ESBA data gathered over the course of the intervention to determine if she could see any trends. Specifically, she reviewed subtest scores to determine potential areas of need that were not currently being addressed through intervention. Ms. Chapelwhite noted that Katherine consistently excelled in areas such as following classroom rules, completing seatwork, working with effort, and listening to the teacher. Comparatively, she noticed that Katherine performed worse on following teacher directions, which she attributed to Katherine's refusal to work with peers even when instructed to do so.

The biggest area that Ms. Chapelwhite noticed Katherine struggled in across the subtests was in getting along with her peers. Based on her scores on the subtests, the team decided to place Katherine in a smaller friendship-making subgroup to intensify the intervention. Ms. Chapelwhite set a new goal based on the final data point collected and continued with the intervention, confident that with the use of data she would meet Katherine's needs.

Putting It All Together

Screening and progress monitoring of SEL skills is a complex, but necessary, part of a fully realized MTSS. Many of the considerations for screening and progress monitoring of SEL skills are similar to that of academic content areas. That is, teachers must consider the school capacity and resources available, technical features of the assessment, validity of thresholds or goals, the student's grade and developmental level, and the intervention being used. Other considerations are quite unique to SEL. For example, teachers must consider different formats of assessments that may be appropriate for their students (e.g., self-report versus direct assessment) and, at least for the time being, must be able to navigate the research to identify research-informed goals that pertain to their students' needs.

To support teachers in this process, we have identified steps to follow aligned with best practices in screening and progress monitoring, along with the unique caveats necessary for the application to the screening and monitoring of SEL skills. We recognize that teachers may still run into challenges when working to implement screening and progress monitoring of SEL skills. In addition, research suggests that school culture and district policies are important predictors of successful data use (Datnow & Hubbard, 2016). If school, district, or state initiatives are not aligned with SEL and/or data use, it will be important to work to build this culture. Organizations such as the Collaborative for Academic, Social, and Emotional Learning, practitioner journals such as *Beyond Behavior*, conferences such as the Council for Exceptional Children annual conference, and university teams researching this topic are available to support this endeavor. We encourage teachers to seek out this additional support just as we encourage our students to do the same.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

This manuscript was supported, in part, by the U. S. Department of Education Grant R324A180220, awarded to The University of Alabama. The opinions expressed are those of the authors and do not represent the views of the institute or the U. S. Department of Education.

References

Ardoin, S. P., Christ, T. J., Morena, L. S., Cormier, D. C., & Klingbeil, D. A. (2013). A systematic review and summarization of the recommendations and research surrounding curriculum-based measurement of oral reading fluency (CBM-R) decision rules. *Journal of School Psychology*, *51*, 1–18. https://doi.org/10.1016/j.jsp.2012.09.004

Assessment Work Group. (2019). *Student social and emotional competence assessment: The current state of the field and a vision for its future*. Collaborative for Academic, Social, and Emotional Learning.

Bavarian, N., Lewis, K. M., DuBois, D. L., Acock, A., Vuchinich, S., Silverthorn, N., . . . Flay, B. R. (2013). Using social-emotional and character development to improve academic outcomes: A matched-pair, cluster-randomized controlled trial in low-income, urban schools. *Journal of School Health*, *83*(11), 771–779. https://doi.org/10.1111/josh.12093

Brackett, M. A., Rivers, S. E., Reyes, M. R., & Salovey, P. (2012). Enhancing academic performance and social and emotional competence with the RULER feeling words curriculum. *Learning and Individual Differences*, *22*(2), 218–224. https://doi.org/10.1016/j.lindif.2010.10.002

Bruhn, A. L., & McDaniel, S. C. (2021). Tier 2: Critical issues in systems, practices, and data. *Journal of Emotional and Behavioral Disorders*, *29*(1), 34–43. https://doi.org/10.1177/1063426620949859

Bruhn, A. L., McDaniel, S. C., Rila, A., & Estrapala, S. (2018). A step-by-step guide to Tier 2 behavioral progress monitoring. *Beyond Behavior*, *27*(1), 15–27. https://doi.org/10.1177/1074295618756984

Corcoran, R. P., Cheung, A. C., Kim, E., & Xie, C. (2018). Effective universal school-based social and emotional learning programs for improving academic achievement: A systematic review and meta-analysis of 50 years of research. *Educational Research Review*, *25*, 56–72. https://doi.org/10.1016/j.edurev.2017.12.001

Datnow, A., & Hubbard, L. (2016). Teacher capacity for and beliefs about data-driven decision making: A literature review of international research. *Journal of Educational Change*, *17*(1), 7–28.

Deno, S. L. (1985). Curriculum-based measurement: The emerging alternative. *Exceptional Children*, *52*, 219–232. https://doi.org/10.1177/001440298505200303

Dixon, M. R., Jackson, J. W., Small, S. L., Horner-King, M. J., Lik, N. M. K., Garcia, Y., & Rosales, R. (2009). Creating single-subject design graphs in Microsoft Excel™ 2007. *Journal of Applied Behavior Analysis*, *42*(2), 277–293. https://doi.org/10.1901/jaba.2009.42-277

Filderman, M. J., & Barnard-Brak, L. (2021). Comparing slope stability and validity for general outcome and specific subskill mastery measurement. *Journal of Applied School Psychology*. Advance online publication. https://doi.org/10.1080/15377903.2021.2012863

Filderman, M. J., & Toste, J. R. (2018). Decisions, decisions, decisions: Using data to make instructional decisions for struggling readers. *TEACHING Exceptional Children*, *50*(3), 130–140. https://doi.org/10.1177/0040059917740701

Gresham, F. M., & Elliott, S. N. (2008). *Social skills improvement system—Rating scales manual*. Pearson Assessments.

Korpershoek, H., Harms, T., de Boer, H., van Kuijk, M., & Doolaard, S. (2016). A meta-analysis of the effects of classroom management strategies and classroom management programs on students' academic, behavioral, emotional, and motivational outcomes. *Review of Educational Research*, *86*(3), 643–680. https://doi.org/10.3102/0034654315626799

LeBuffe, P. A., Shapiro, V. B., & Naglieri, J. A. (2009). *Devereaux student strengths assessment (DESSA)*. Kaplan Press.

Mantz, L. S., Bear, G. G., Yang, C., & Harris, A. (2018). The Delaware emotional competency scale (DSECS-S): Evidence of validity and reliability. *Child Indicators Research*, *11*, 137–157. https://doi.org/10.1007/s12187-016-9427-6

McKown, C. (2019). Challenges and opportunities in the applied assessment of student social and emotional learning. *Educational Psychologist*, *54*(3), 205–221. https://doi.org/10.1080/00461520.2019.1614446

McKown, C., & Herman, B. (2020). *SEL assessment to support effective social emotional learning practices at scale*. Edna Bennett Pierce Prevention Research Center, The Pennsylvania State University.

McKown, C., Russo-Ponsaran, N. M., Johnson, J. K., Russo, J., & Allen, A. (2016). Web-based assessment of children's

social-emotional comprehension. *Journal of Psychoeducational Assessment*, *34*(4), 322–338. https://doi.org/10.1177/0734282915604564

Naglier, J. A., LeBuffe, P. A., & Shapiro, V. B. (2011). *Devereaux student strengths assessment-mini (DESSA-mini)*. Kaplan Press.

National Center on Intensive Intervention. (2013). *Data-based individualization: A framework for intensive intervention*. Office of Special Education, U.S. Department of Education.

Pennefather, J. T., & Smolkowski, K. (2015). Validation of the elementary social behavior assessment: A measure of student prosocial school behaviors. *Assessment for Effective Intervention*, *40*(3), 143–154. https://doi.org/10.1177/1534508414557562

Portnow, S., Downer, J., & Brown, J. (2015). *An increase in emotional support, a reduction in negative social emotional skills, or both? Examining how universal social emotional programs achieve reductions in aggression*. Society for Research on Educational Effectiveness.

Russo, N. M., Lerner, M. D., McKown, C., Weber, R. J., Karls, A., Kang, E., & Sommer, S. L. (2019). Web-based assessment of social–emotional skills in school-aged youth with autism spectrum disorder. *Autism Research*, *12*(8), 1260–1271. https://doi.org/10.1002/aur.2123

Search Institute. (2016). *User guide for the Developmental Assets Profile* Author.

Soland, J., Rimm-Kaufman, S. E., Kuhfeld, M., & Ventura-Abbas, N. (2022). Empirical benchmarks for changes in social and emotional skills over time. *Child Development*, *93*, 1123–1144. https://doi.org/10.1111/cdev.13741

Stecker, P. M., & Lembke, E. S. (2011). *Advanced applications of CBM in reading (K-6): Instructional decision-making strategies manual*. National Center on Student Progress Monitoring.

Tripod Education Partners. (2018). *Tripod SEL survey suite: Preliminary technical manual*.

Walker, H. M., Marquez, B., Yeaton, P., Pennefather, J., Forness, S. R., & Vincent, C. G. (2015). Teacher judgment in assessing students' social behavior within a response-to-intervention framework: Using what teachers know. *Education and Treatment of Children*, *38*(3), 363–382. https://doi.org/10.1353/etc.2015.0019

Weissberg, R. P., Goren, P., Domitrovich, C., & Dusenbury, L. (2013). *CASEL guide 2013. Effective social and emotional learning programs: Preschool and elementary school edition*. CASEL.