



SMART or Not?

Writing Specific, Measurable IEP Goals

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Mr. Chen, a special educator, is drafting individualized education program (IEP) goals for upcoming annual review meetings for two of his students with high-incidence disabilities—Mikenna and Andre—who are fourth graders in his resource room class. He knows that IEP goals are easier to implement and track if they are specific, include observable or measurable behaviors, and represent realistic growth for students. How can Mr. Chen write IEP goals that reflect the individual strengths and needs of his students but are also specific and measurable?

The recent Supreme Court case *Endrew F. v. Douglas Co. School District* highlighted the need to develop meaningful IEPs for students with disabilities (U.S. Department of Education, 2017). Endrew's parents contended that his "academic and functional progress had stalled" (p. 3) in part because his educational program and IEP goals did not change from year to year. In writing about the

SMART acronym. Although different authors define the SMART acronym differently (Jung, 2007), an IEP-related interpretation of the acronym is as follows: specific, measurable, action verbs, realistic, and time limited. In addition to these features, well-written IEP goals reflect students' unique strengths and needs. Using the SMART acronym as a guide, educators can produce specific, measurable, realistic goals with action verbs (see Table 1, "Examples").

Components of IEP Goals and Short-Term Objectives

In general, IEP goals include four components: conditions, learner, behavior, and criteria. Each component contributes to making goals SMART. Although many formats are appropriate for writing IEP goals, the cloze statement provided in Table 1 can be used as a template. Table 1 also shows examples and nonexamples of SMART

collected over time with valid, reliable measures help educators establish goals and choose appropriate interventions (Pretti-Frontczak & Bricker, 2000; Spiel et al., 2014). A PLAAFP usually includes quantitative data (e.g., the number of words read correctly, how many task steps completed correctly in 2 minutes) related to a student's performance in comparison with that of same-aged or grade-level peers.

For Mikenna's PLAAFP section, Mr. Chen reported the number of problems correct and the percentile ranking on grade-level curriculum-based measures (CBMs) as well as Mikenna's most recent standardized test scores in math. Mikenna's scores on fourth-grade CBMs placed her below the 50th percentile in computation and problem solving (Figure 2). Mr. Chen identified the types of problems that she solved correctly and reported those as her strengths. Problems that she solved incorrectly or did not attempt were also identified. From this information, Mr. Chen was able to identify whether her math errors were in computation (basic facts), procedures, or strategy use.

To provide additional details about students' performance, qualitative data are also important. For example, (a) qualitative data on the specific types of skills that students have fully or partially mastered; (b) observations of motivation, attention, and engagement; (c) survey results; and (d) teacher notes from class observations, parental comments, and student interactions with peers during instruction can all yield useful information (Spiel et al., 2014). Narrative descriptions of students added to PLAAFPs help to create a fine-grained picture of strengths and needs on which to base SMART IEP goals.

Mr. Chen added information about his class observations of Mikenna and her responses on the math attitudes survey that he created in the PLAAFP section of her IEP. These results showed that she preferred reading to math and had little confidence in math as compared with her peers in general

Many IEP goals fall short in terms of individualization, provision of sufficient detail, alignment with students' present levels of performance, or high expectations.

Individuals with Disabilities Education Act (IDEA), Chief Justice Roberts wrote that students who make "merely more than de minimis progress from year to year can hardly be said to have been offered an education at all. . . . The IDEA demands more," including an "educational program reasonably calculated to enable a child to make progress appropriate in light of the child's circumstances" (p. 5; Wright & Wright, 2006). However, many IEP goals fall short in terms of individualization, provision of sufficient detail, alignment with students' present levels of performance, or high expectations (Jung, 2007; Pretti-Frontczak & Bricker, 2000; see Table 1, "Nonexamples").

To avoid these shortcomings and ensure that goals are more than de minimis, educators can use the

IEP goals. The IDEA (2004) does not require short-term objectives (STOs) for every IEP goal; however, when they are included, goal writers can use the same format to ensure that STOs contain all components. Many educators find that checklists are useful in helping them monitor whether their IEP goals include all recommended parts (Figure 1). Writing IEP goals, however, begins with students' present levels of academic achievement and functional performance.

Learner

Descriptions of students' strengths, interests, and needs within each domain form the foundation of IEPs (Spiel, Evans, & Langberg, 2014). The IDEA (2004) requires that data be reported on students' present levels of academic achievement and functional performance (PLAAFPs). Data that are

Table 1. IEP Goal Makeover: Format for Writing SMART Goals With Examples and Nonexamples

Template for writing SMART goals ^a	
Nonexamples	Examples
Given instructional reading-level text, Eugenia will increase her oral reading rate by 22 words correct per minute.	Given a Guided Reading Level S passage, individualized reading instruction in word chunking and use of context, and directions to read quickly and smoothly, Eugenia will read aloud with 95% accuracy at a rate of 84 words correct per minute in two of three trials by [target date].
When asked, Maverick will brush his teeth with 100% accuracy.	When provided the appropriate materials (i.e., a toothbrush, toothpaste, and sink) and prompted to brush, Maverick will brush his teeth after school snack or meal time, completing 8 of 10 steps independently, 4 days per week for 3 consecutive weeks [target date].
Given a grade-level math CBM, Jorge will score 31 problems correct.	Given a third-grade mixed-operation math computation CBM, pencil and paper, and the prompt to work for 8 minutes, Jorge will solve and write the answers with 31 problems correct in three consecutive trials by [target date].

Note. CBM = curriculum-based measure; IEP = individualized education program.

^a“Given [conditions], [the learner] will [observable behavior] with [mastery criteria] in — of — trials [retention criteria] by [date].”

education. He concluded that she needed support to increase her ability and, therefore, her self-perception and confidence. He planned to foster confidence by assigning work that she could complete with high rates of

success to increase fluency (speed and accuracy) in these foundational skills, while planning for targeted, scaffolded instruction in areas of weakness. He would create IEP goals to reflect these dual needs.

Like academic goals, social- and functional-behavior IEP goals require detailed PLAAFPs to compare a student’s performance to that of typical peers, set specific annual goals, and track changes over time. Once the

Figure 1. Self-monitoring checklist for determining the completeness of individualized education program (IEP) goals and short-term objectives (STOs)

IEP Goals & STOs: Components for Consideration <i>Do my IEP goals and STOs include...</i>	✓
All components (learner, specific and measurable behavior, conditions, criteria) in a concise, readable statement (e.g., logical flow, grammatically correct, free from errors in conventions)?	
Specific materials used during the assessment of the goals/STOs?	
Specific level of assistance used during the assessment of the goals/STOs?	
Directions or instructions used during the assessment of the goals/STOs?	
Name or identification of my target student?	
An observable, measurable student action or skill; A behavior that the learner does, not a teacher action (scores, increases)?	
An end/target date for completion?	
Mastery criteria that represents an appropriate step for the time allotted (e.g., one year for IEP goal, six months for a short-term objective)?	
Units of measurement that match type of behavior or data that I used for mastery criteria?	
Retention criteria?	
Dates and method for progress monitoring?	

Figure 2. Present levels of academic achievement and functional performance: Narratives written by Mr. Chen for Mikenna (CBM = curriculum-based measure)

Present Level of Academic Achievement and Functional Performance: Mathematics	
Quantitative data	Mikenna completed a math attitudes survey (5-point Likert scale) which showed that she prefers reading to math, and has relatively low confidence in her math skills (2.4 as compared to an average of 4.1 out of 5 for class peers). Her most recent standardized test score in math placed her at the 12th percentile for computation and the 18th for problem solving and math application. She used a calculator on the problem-solving/application portion of the standardized test. On a 4th grade CBM (computation), Mikenna's score placed her below the 25th percentile for all 4th graders. For the application CBM, she scored at the 35th percentile. She had 4 of 5 multi-digit addition and 3 of 6 subtraction problems correct. None of the problems with regrouping were correct. She correctly completed addition and subtraction of fractions with like denominators (3 of 3 problems). She added numerators and denominators together for fractions with unlike denominators. She did not attempt any division problems. She used tally marks when completing multiplication problems to show "groups of" with repeated addition. She had all measurement, time, and money questions correct on the application CBM. Typically achieving fourth graders have mastered/memorized basic facts, regroup when using all operations.
Qualitative data	Mikenna continually glances at the clock during math assessments, and during instruction she frequently engages in avoidance behaviors (e.g., asking to go to the school nurse, dropping items on the floor) that she does not display in other settings. Mikenna works well with peers during group problem solving. During study hall, she frequently chooses to start with reading or social studies, saying that she will have parents assist with math at home.

PLAAFP section is complete, goal writers can draft SMART IEP goals in terms of three elements: condition, behavior, and criteria.

Condition

Condition statements make IEP goals specific, measurable, and replicable by describing the context in which students perform target behaviors. Condition statements answer questions such as "Where is the behavior performed?" "What materials does the student use to complete the behavior?" and "What level of support is provided?" To facilitate writing strong condition statements, professionals can use the acronym MAD as a guide: materials, assistance, and directions or instruction (Table 2).

Materials. Materials include anything that students use when performing target behaviors or skills during progress monitoring. Materials vary widely depending on the strengths, needs, and contexts in which students perform target skills. Materials may reflect a variety of possible supports, such as modified texts, assistive technologies, picture schedules, video models, manipulatives, or everyday objects used to complete functional skills (e.g., microwave, washing machine, coat with zipper). Examples of materials (see Table 2) should not represent an exhaustive list but reflect individual strengths and needs and the demands of the contexts in which students perform target skills. Collecting and

reporting detailed PLAAFP statements helps educators develop specific IEP goals, particularly when they note details about the factors that foster students' successful task completion. Collaborating with related service providers, such as occupational and physical therapists and social workers, and with general educators can assist goal writers in identifying appropriate materials to incorporate into IEP goals.

Materials also include assessments completed by students to measure skill performance. Level and type of assessment establish the specific conditions in IEP goals. For example, fourth- and second-grade math assessments differ in types of problems according to the scope and sequence in mathematics. Using terms such as

Table 2. Examples of MAD Conditions for IEP Goals and Short-Term Objectives

Skill area	Materials	Assistance	Directions or instructions
Reading comprehension	Passage (with level indicated)	Written literal comprehension questions with four print answers	Test-taking strategies and a prompt to look back in the text
Alphabetic principle	Print cards with individual uppercase letters (52 total)	A choice of three sounds pronounced by the teacher	“Say the sound”
Math	Two-factor binomial multiplication math problems	FOIL cue card with steps and a sample problem/solution	“Show all your work when solving the problems”
Writing	Visual, written, or verbal story starter (or CBM topic), pencil, lined paper	Graphic organizer for planning	“Plan for 1 minute and write for 3 minutes”
Oral language	20 pictures of common objects	Words stated twice by teacher	“Say the word the fast way”
Social skills	A card with several conversation-initiating prompts prior to entering a social situation	Gesture or visual prompt to initiate interaction	Explicit instruction on initiating peer interaction (target skill)
Functional behavior	Toothpaste, toothbrush, and bathroom setting with a sink	Hand-over-hand support when adding toothpaste to brush	Explicit instruction with backward chaining

Note. CBM = curriculum-based measure; FOIL = multiply first terms, outer terms, inner terms, then last terms; IEP = individualized education program; MAD = materials, assistance, and directions or instruction.

grade-level assessment, instructional-level passages, and age-appropriate tasks introduces ambiguity into IEP goals. One rationale for using general terms for materials is concern over portability of the IEP. If students move to districts that use different materials, an IEP goal may need revision. However, the benefit of having specific conditions outweighs the inconvenience of such revisions. Although general terms such as these offer district personnel flexibility in writing goals, parents may view them as de minimus because expectations seem vague or static. Instead, goal writers can specify the assessment level to use.

Providing specific details about the materials to use eliminates ambiguity and provides a measurable standard for tracking student progress—another SMART feature. Teachers, parents, and others comparing IEPs from different years can track changes in reading passages or CBM levels as well as changes in target scores.

Mr. Chen made Mikenna’s IEP specific by including materials to measure her performance: a fifth-grade curriculum-based math assessment. He remembered that he had collected Mikenna’s math data this year using a fourth-grade assessment (see Figure 2) and that the IEP goal would be revisited in 1 year, when she would be in fifth grade.

To prepare for Andre’s IEP meeting, Mr. Chen looked at his IEP goals from the past 2 years (i.e., second and third grade). Mr. Chen noted that Andre’s reading rate targets—specifically, words correct per minute (WCPM)—had increased by only 10 to 12 each year; however, Andre’s accuracy goals advanced by three to four levels. Andre read aloud Level L passages (Fountas & Pinnell, 2016) at an instructional level during his most recent assessments. To make Andre’s reading level clear, Mr. Chen noted that Level L is equivalent to approximately mid- to late second grade. He then specified in the goal condition that independent-level

reading of Level Q text (early to mid-fourth grade) would be Andre’s goal for this year’s IEP.

Assistance. Assistance is defined as the number, type, and level of supports that students receive as they complete skills. For example, specifying that a task will be completed independently in an IEP goal makes the level of assistance specific—another component of SMART IEP goals. At times, teachers may provide verbal prompting, hand-over-hand assistance, or other supports, such as cue cards, mnemonics, calculators, math-facts tables, or checklists. Without statements about assistance level or specific supports, parents or others may assume that students are working independently. Assistance levels also make IEP goals measurable and provide evidence of students’ progress. Evidence of movement toward independence and the possible levels of assistance that can be included in an IEP goal include, for example, the times

Table 3. Observable, Measurable Action Verbs Acceptable for IEP Goals and Short-Term Objectives

Area	Acceptable	Acceptable if . . .	Not acceptable
Academic	Answer verbally Point to Solve	Evaluate [by . . .] Demonstrate [what?] Analyze [by . . .]	Achieve/attain Increase (score) Decrease (score) Improve Know Think Comprehend Understand Develop Will not
Communication	Pronounce/target sound or word Repeat Verbally request	Request [by . . . sign, gesture, PECS] Use AAC [to do what?]	
Functional	Cook/prepare recipes Count coins/money	Complete steps in . . . [followed by task such as dressing]	
Self-determination	State preferences Verbally state problem Verbally communicate accommodations	Self-evaluate [what behavior, with what tool/instrument] Self-monitor [what behavior, with what tool/instrument]	
Social	Verbally initiate Maintain appropriate personal space	Identify [by doing what?] Demonstrate [by doing what?] Interact appropriately [by?]	

Note. These behaviors do not include criteria or measures that professionals plan to use to evaluate student performance. AAC = augmentative and alternative communication; IEP = individualized education program; PECS = picture exchange communication systems.

when (a) students move from using a video model to completing tasks with only verbal prompting or a checklist and (b) the number of prompts needed decreases over time.

As Mr. Chen wrote Mikenna's IEP goals, he considered what type and level of assistance she needed in order to complete her target skills. For her math IEP goal, he wrote that she would receive verbal prompts and praise as needed to support her motivation and engagement. This directly aligned with observations in her PLAAFP (Figure 2) about her low confidence level.

Directions. Finally, condition statements in IEP goals provide specific directions to students. Directions sometimes include how students will complete assessments and what type of intervention was used to move them toward achieving the IEP goal. For example, for a writing CBM, directions may be to “plan for 1 minute and write for 3 minutes.” The fact that students wrote for only 3 minutes allows parents and others who read the IEP to

put outcomes in the appropriate context. Knowing these directions also helps professionals make appropriate interpretations when comparing scores with benchmark tables. Taken together, materials, assistance, and directions make IEP goals specific and measurable (Figure 1).

Behavior

The A in SMART reminds professionals to use action verbs when they identify the behavior for an IEP goal; that is, the action verb corresponds with observable behavior (see Table 1). Behaviors are specific skills that students perform as part of their IEP goals. Using action verbs such as *read aloud*, *tie shoes*, *brush teeth*, *produce audible sounds*, *point to*, *circle the answer*, and *write* makes behaviors observable, measurable, and student focused. Table 3 contains examples and nonexamples of action verbs sometimes used in IEP goals.

Professionals sometimes write vague IEP goals by using behaviors or

verbs that are not observable. For example, students can *read and comprehend* or *solve* a math problem without taking any observable action. The term *identify* is another example of an ambiguous verb because it may entail many concepts: pointing, stating, coloring, circling, and completing other actions. Including specific conditions sometimes clarifies these verbs: “Given a field of four lowercase letter cards, a letter sound pronounced by the teacher, and the verbal prompt ‘Which letter says . . . ?’ the learner will independently identify . . .” The detailed condition clarifies *identifies* as the action verb: the student will point to or hand the teacher the correct letter card. Adverbial clauses also clarify vague verbs (e.g., “demonstrate comprehension *by stating the main idea and three supporting details*,” “engage in career planning *by producing a written action plan*”).

Finally, appropriate behaviors or strong action verbs are student-centered, meaning that they refer to actions that students take as they

complete tasks or engage in progress-monitoring assessments. This may include completing steps in doing laundry, verbally answering literal comprehension questions, producing correct phonemes, requesting assistance by raising hand, or removing self from stressful situations. Verbs such as *improve*, *increase*, and *decrease* do not refer to skills or tasks that students perform, even though they do suggest measurable changes in behaviors.

While drafting Mikenna's IEP goal, Mr. Chen wondered whether writing "Mikenna will solve math problems" was sufficient for the action verb. Because he thought that this was somewhat ambiguous (i.e., she could do this in her head), he wrote "solve and write answers" instead. For Andre, Mr. Chen initially wrote "Andre will increase his independent reading level to Level Q and his reading rate to 85 WCPM." However, he decided to change this to "Andre will read aloud" and to include WCPM as the criteria—the final section of the IEP template.

Criteria

The criteria in IEP goals provide two types of information that make goals measurable. *Mastery criteria*, the first type of information, are the expected levels of performance with respect to particular skills. *Retention criteria* refer to the number of times or how often students must achieve a mastery level to demonstrate skill acquisition. Setting appropriate mastery and retention criteria make IEP goals realistic and time limited—the final SMART components.

Mastery criteria. Mastery criteria in academic areas often include quantitative scores, such as digits correct, correct writing sequences, words read (aloud) correctly, or percentile rankings from benchmark tables. Units of measurement used for mastery criteria closely align with PLAAFP units to allow for monitoring of students' growth.

Mr. Chen noted that Andre's past IEP goals and PLAAFP included

percentage accuracy reading Level Q text and reading rate in WCPM as part of the mastery criteria. As a result, he knew that the new IEP goal should include performance levels for each of these. Similarly, Mikenna's PLAAFP and IEP goal criteria included digits correct with the corresponding percentile ranking and percentage accuracy from her math assessment. How could he estimate realistic one-step growth based on their PLAAFPs?

For many students, a realistic expectation for growth is one academic year of progress. For example, if students read third-grade passages this year, a realistic goal is to read fourth-grade passages at the instructional level in 1 year's time. Benchmark tables show percentile rankings for scores organized into grade levels and marking periods (e.g., Hasbrouck & Tindal, 2006). Looking at the next year's grade-level benchmark scores at the same or slightly higher percentile ranking allows goal writers to predict growth for students. The Common Core and developmental milestone tables also describe skills' progressions in different areas (National Governors Association Center for Best Practices & Council of State School Officers, 2010a, 2010b). Finally, published sources provide guidelines for expected growth rates in reading rates (e.g., Hasbrouck & Tindal, 2006) and math and writing scores (e.g., Hosp, Hosp, & Howell, 2007). For example, Fuchs and Fuchs (1993 [as cited in Hosp et al., 2007]) suggested realistic and ambitious growth rates of 0.7 and 1.15 digits correct per week, respectively, for fourth graders completing math assessments. Multiplying these growth rates by expected weeks of intervention estimates increases in students' scores over time. Adding the increase to students' PLAAFP score results in specific mastery criteria. These methods, however, generally rely on data from typically achieving students. Students with IEPs may follow atypical growth patterns, taking longer to acquire academic skills than their peers, or teachers may attempt to accelerate growth. Professionals can

instead examine students' own growth rates to estimate 1 year's growth for realistic IEP criteria.

To estimate expected change in a particular student's performance for the upcoming year from previous years' growth, professionals first calculate his or her average weekly growth. This is done by finding the student's overall change in performance over a period (ending score – beginning score) and dividing by the number of weeks of the intervention. The average of at least the five most recently collected data points/scores provides a baseline for growth in the upcoming period (Hosp et al., 2007).

Mr. Chen knew that Andre had been making steady progress in his reading rate over the past year, so he decided to base mastery criteria for the new IEP goal on Andre's current growth rate. First, Mr. Chen found Andre's average weekly growth rate by

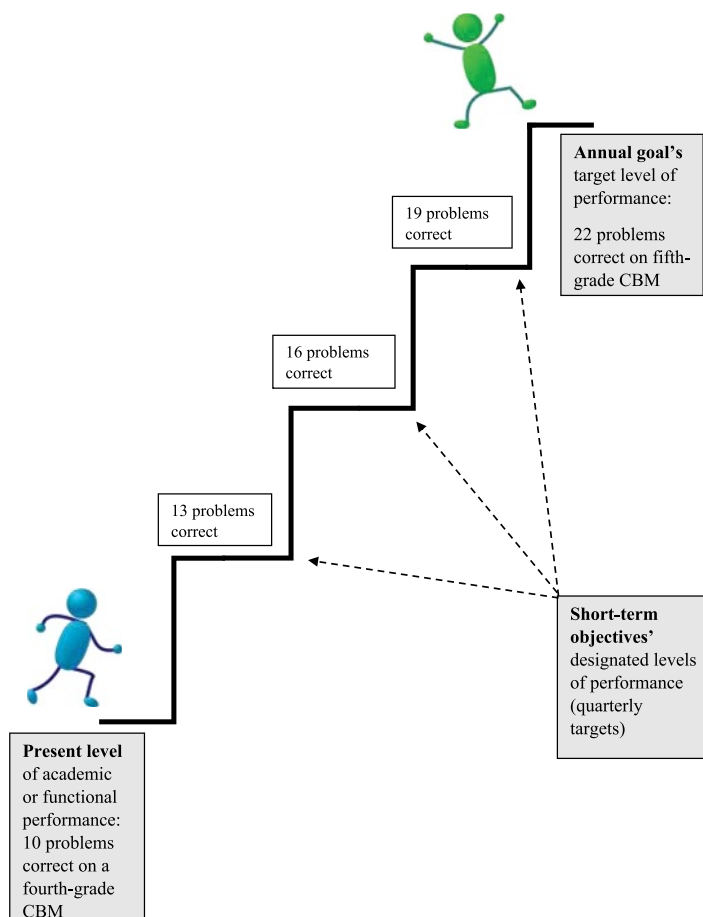
- *Calculating Andre's change in reading rate by subtracting his score at the start of intervention from his ending score (WCPM: $48 - 32 = 16$ -word increase during the intervention period)*
- *Finding his weekly rate change by dividing the overall rate by the number of weeks of the intervention ($16\text{-word increase} \div 16 \text{ weeks} = 1 \text{ word/week}$)*

Mr. Chen then used Andre's growth rate to set mastery criteria by

- *Multiplying the growth rate by the number of expected weeks of the intervention ($1 \text{ word per week} \times 36 \text{ weeks of intervention in the upcoming year} = 36\text{-word increase total}$)*
- *Adding Andre's PLAAFP score (WCPM: 48) to his expected increase (36) = 84*

Mr. Chen then completed the same process using digits correct to estimate a 1-year step for Mikenna. He decided to write STOs so that he and the students could track progress toward mastery levels.

Figure 3. Stair step model illustrating relationship among individualized education program goals and short-term objectives (CBM = curriculum-based measure)



As shown in Figure 3, STOs can be represented as stair steps moving students from their PLAAFPs (i.e., the bottom of the staircase) to their annual goal levels (i.e., the top of the staircase). Using STOs as benchmarking points makes it possible for educators to monitor whether students are on track to achieve the mastery levels of the IEP goals. In the example shown in Figure 3, the number of problems correct gradually increases, demonstrating that the student's performance shifts from PLAAFP to the level of mastery criteria over time. This method considers quantitative scores only. However, STOs can reflect component or subskills that support overarching IEP goals. For example, before achieving mastery criteria on a fourth-grade math computation CBM, students need to successfully solve and write answers to all types of operations

using whole numbers and some fractions. Each STO could then address a different operation to support the overarching IEP goal. Similarly, if the student's annual goal was to use the toilet independently, STOs might include component skills (i.e., awareness of need to use the toilet, dressing, hand washing).

Mr. Chen decided that providing STOs would encourage Mikenna and help motivate her by showing her progress. On the fifth-grade CBM that she would use the following year, Mikenna needed to add, subtract, multiply, and divide single- and multidigit numbers and complete operations with fractions with like denominators. The fifth-grade CBM also included problems with percents and decimals. Following the same format as the IEP goal, Mr. Chen selected three skills (multiplication, division, fractions/percents) as STOs supporting

Mikenna's IEP goal of solving and writing the answers to problems on the CBM. For example, the first STO read "Given a teacher-made assessment with 10 one-, two-, and three-digit multiplication problems, as well as unlimited time, pencil, paper, and verbal prompts as needed to support engagement, Mikenna will solve and write the answer to 8 of 10 problems by [date]."

For Andre's IEP, Mr. Chen had set a realistic oral reading target score of 84 WCPM. He decided to establish STOs by evenly distributing the reading rate increase over the entire year. He divided the expected increase of 36 WCPM into equal parts ($36/4 = 9$) to match grading periods in the school year. Mastery criteria for each STO therefore included a 9-WCPM increase in Andre's reading rate: STO 1 = 57, STO 2 = 66, STO 3 = 75, STO 4 = 84.

Retention criteria. *Retention criteria* refer to the number of probes or trials in which the student needs to demonstrate mastery-level performance. Students may achieve mastery-level performance once through random chance; as such, using a series of trials or a mean score over several probes establishes that the student has truly mastered the skill. Retention criteria can be written in different patterns, such as “two of three trials,” “four of five probes,” “three consecutive trials,” or “average score across four trials.” This might be appropriate for skills such as reading fluency (WCPM) or comprehension in which students complete multiple sets of questions with different passages. Similarly, steps completed correctly in a task analysis of functional skills (e.g., toothbrushing) can be used as retention criteria: an average of 10 of 12 steps correct in three consecutive probes. The average is calculated with students’ scores on probes closest to the target date for the IEP goal.

Mr. Chen knew that when students are familiar with the passage topic, their rate and comprehension would be better than when the topic was unfamiliar. He did not want Andre to meet his IEP goal criteria simply because he was familiar with the topic. To control for this, he decided to have Andre read three different passages during progress monitoring and to report the median score. Andre’s median reading rate across 2 weeks of progress monitoring had to meet or exceed the WCPM criteria for each STO.

Adding a date for completion makes IEP goals and STOs time limited. Target scores used in IEP goals and STOs are estimates of the progress that students will make in an allotted period. The completion date for IEP goals is typically 1 year from the date when they were adopted and approved in the IEP meeting (Wright & Wright, 2006). Dates for STOs (if included) and accompanying progress-monitoring dates are often distributed across the academic year but may or may not align with the ends of academic quarters. Whereas phrases such as “in 1

year” or “after 9 weeks” introduce ambiguity into IEP goals, including specific dates makes reading and evaluating progress toward target scores more comprehensible for parents. If

district or state requirements may complicate their task. Districts and states set policies for writing IEPs for students with disabilities to which personnel must adhere.

The recommended template—which includes conditions, learner, behavior, and criteria—can assist professionals in developing goals that meet the rigorous demands of a legal contract with parents.

students are not on track to achieve mastery of IEP goals by target dates, professionals can implement different interventions or increase the intensity of current interventions to accelerate students’ progress. As a last resort, mastery criteria for IEP goals can be changed to reflect the new rates of growth; however, in keeping with the *Endrew* decision, educators should avoid writing the same goals year after year with minimal evidence of student progress toward mastery. As with previous components, the self-monitoring checklist (Figure 1) guides professionals in evaluating the presence and quality of time-limiting components of IEP goals.

Implications for Practice

Teachers and other professionals working with students with disabilities continue to need assistance in developing SMART IEP goals. Appropriate IEP goals guide practitioners as they work with students with disabilities. SMART goals also help school district personnel to demonstrate fulfillment of IDEA’s requirements and communicate expectations to parents of children with IEPs. SMART goals based on students’ present levels of performance with an emphasis on their strengths and needs communicate expectations and eliminate ambiguities. The recommended template—which includes conditions, learner, behavior, and criteria—can assist professionals in developing goals that meet the rigorous demands of a legal contract with parents. Although goal writers may understand SMART IEP goals and have adequate PLAAPPs to write them,

Special Considerations

In some cases, states and/or districts require special considerations for IEP goals. These may impact a teacher’s ability to create SMART goals.

Standards-Based IEP Goals

Some districts require that IEP goals reflect grade-level, Common Core, or state standards with STOs specifying behaviors and criteria related to students’ skills. Tying specific skills to the Common Core may be difficult, particularly for older students working far below grade level on academic skills or those working on functional skills (e.g., a high school student learning to do laundry independently). It may be appropriate to develop an IEP goal related to a foundational reading skill for students who have not mastered phonics or fluent reading; however, these skills are generally associated with standards for Grades 1 to 4. Consequently, writing an IEP goal associated with grade-level standards may be difficult, especially when district policy requires that only grade-level standards be used. In these cases, professionals can write the overarching IEP goal using a general standard (in this case, reading) that aligns with the specific IEP skill. STOs can then address the more specific component skills associated with a lower-grade standard that support the broad IEP goal. For example, for Mikenna’s goal standard, Mr. Chen could have used CCSS.Math.Content.4.NBT.B.6: “Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors” (National Governors Association Center for Best Practices & Council of State School Officers, 2010b).

Mikenna's STOs in this case might focus on subskills that she must learn to successfully complete division problems (e.g., creating "groups of" from a given number of objects or understanding division as the reverse of multiplication). All of these STOs allow Mikenna to work toward a grade-level standard. Although this method works, tying IEP goals to grade-level standards will continue to pose problems for goal writers when students are working well below grade level.

Mapping Social and Functional Area Goals to Learning Standards

Writing IEP goals for social and functional areas can be difficult for a number of reasons. Few widely accepted methods are available for (a) establishing present levels of performance, (b) determining what a "typical" performance might be (for comparison with that of peers), (c) finding the current rate of growth, or (d) estimating the change in student performance for the next year. For example, professionals may not have available CBMs, surveys, or checklists to collect data on a child's current functioning. Similarly, learning standards and benchmarking tables with expected rates of growth over time may not be available for social or functional skills, or they may contain a broad range of ages during which individuals master certain skills.

Some states have adopted social-emotional learning standards that provide some guidance for goal writers (e.g., Illinois State Board of Education). Although not all states have social-emotional learning standards with descriptions of age-related milestones, some professional organizations have developed sets of such standards grounded in research (e.g., CASEL). These standards help professionals identify social skills that students need to better function across environments (Dusenbury, Zadzil, Mart, & Weissberg, 2011).

In the case of functional skills, district personnel may require that functional goals be tied to grade-level

Common Core standards. Math and English language arts standards, albeit advanced, may align somewhat with skills that students learn in secondary classes as they prepare for postsecondary life. However, IEP goals focused on daily living, self-care, and leisure activities may require some creative interpretation of standards. For example, an IEP goal focused on independent living skills, such as doing laundry and cooking, might reference CCSS.ELA-Literacy.RST.9-10.3: "Follow precisely a complex multi-step procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text" (National Governors Association Center for Best Practices & Council of State School Officers, 2010b).

Prioritizing IEP Goals

Although there is no required number of goals, each area in which students receive services contributes at least one goal. The final determination of how many goals is highly individualized. IEP teams work together to interpret and summarize baseline data after they are collected. The team, which includes the parents, then prioritizes skills most important for students. The team considers the students' strengths and needs, the learning standards, the age appropriateness, and the areas with the greatest potential impact across contexts, including home and school. In addition, teams consider the available time and the impact of providing special education services on the students' current and future inclusion with typically achieving peers. Due to the *Andrew* case, teams may want to reflect on whether making greater progress on a few core skills benefits the student more than making little progress toward a large number of goals.

Computer-Generated IEPs

Districts' use of computerized or electronic IEPs has increased over the years, making IEPs easier to write and more uniform. Electronic forms allow

multiple service providers to access documents, manage IEP dates, quickly input demographic information, and create goals from a database within the program (More & Hart, 2013; Serfass & Peterson, 2007; Wilson, Michaels, & Margolis, 2005). Goal banks in these programs, however, may not offer useful or appropriate choices, or the goals offered may lack specificity (Wilson et al., 2005). More and Hart Barnett (2014) observed that goals in computerized programs often "fail to match the student's learning, behavioral, and social needs, and are not clearly observable and measurable" (p. 104), which in turn limits goal writers' ability to individualize for students. Most IEP programs allow users to individually create goals to add to goal banks for review and later use. This may require training that teachers may not receive (More & Hart, 2013; More & Hart Barnett, 2014). District personnel considering electronic IEP programs can determine whether the program's options allow sufficient flexibility in formatting the IEP goals so that they are individualized. Although goals do not have to follow condition-learner-behavior-criteria sequence, SMART goals contain all these components. Optimal electronic options allow for these details and provide professionals with the option of writing their own IEP goals and STOs.

Conclusion

Well-written annual goals and STOs based on current and accurate PLAAFPs are the core of legally defensible IEPs. Professionals who use the condition-learner-behavior-criteria template produce SMART IEP goals. The template allows for more or less specificity in the conditions for performance of the behavior, in selecting measures for particular behaviors that fit district and school practices, and in determining growth rates on which to base 1-year steps for students. Although professionals from various disciplines may have different approaches to writing IEP goals and STOs and

establishing criteria, the structured template can provide some common ground for conversations within districts and schools. This in turn may result in SMART goals and STOs that benefit all stakeholders in the IEP process.

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