RTI/MTSS Classroom Teacher Toolkit

BET Team Training: How to Identify Emerging Academic Problems & Collect Data on Classroom Interventions

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How To: Define Academic Problems: The First Step in Effective Intervention Planning

Students who struggle with academic deficits do not do so in isolation. Their difficulties are played out in the larger context of the school environment and curriculum—and represent a 'mismatch' between the characteristics of the student and the instructional demands of the classroom (Foorman & Torgesen, 2001).

It may surprise educators to learn that the problem-identification step is the most critical for matching the student to an effective intervention (Bergan, 1995). Problem identification statements should be defined in clear and specific terms sufficient to pass 'the stranger test' (Howell, Hosp, & Kurns, 2008). That is, the student problem can be judged as adequately defined if a person with no background knowledge of the case and equipped only with the problem-identification statement can observe the student in the academic setting and know with confidence when the problem behavior is displayed and when it is not.

Here are recommendations for increasing teacher capacity to describe student academic problems in specific terms, and generate a hypothesis about why the problem is occurring.

1. **Describe the academic problem in specific, skill-based terms with a meaningful instructional context** (Batsche et al., 2008; Upah, 2008). Write a clear, brief description of the academic skill or performance deficit that focuses on a specific skill or performance area. Include information about the conditions under which the academic problem is observed and typical or expected level of performance.

   - *Conditions.* Describe the environmental conditions or task demands in place when the academic problem is observed.
   - *Problem Description.* Describe the actual observable academic behavior with which the student has difficulty. If available, include specifics about student performance, such as rate of work, accuracy, or other relevant quantitative information.
   - *Typical or Expected Level of Performance.* Provide a typical or expected performance criterion for this skill or behavior. Typical or expected academic performance can be calculated using a variety of sources, such as benchmark norms, local (classroom) norms, or expert opinion.

Reading-Related Problems: Sample Definitions		
Environmental Conditions or Task Demands	**Problem Description**	**Typical or Expected Level of Performance**
When shown flashcards with mixed-case letters for 3 seconds	Annika can name 38 of 52 correctly	while most peers in her class can name all letters correctly.
When asked to blend / segment onsets and rimes of single-syllable spoken words	Thomas (grade 1) is inconsistent in this skill	while this is a Kindergarten ELA/Reading standard.
When shown CVC words from all vowel families via flashcards	Terrance requires adult prompting, hints, and occasional direction to sound out and blend the words	while classmates perform the task with prompting only.
When reading aloud from a 1-minute 4th-grade passage	Benjamin reads an average of 45 words	while the fall norm (20th percentile) at Grade 4 is 68 words per minute.

When completing sets of 5 short-answer questions based on assigned readings…	Neda scores an average of 40% (2 of 5 correct)	while classmates score an average of 80%.
When directed to match terms and definitions for 20 social-studies terms…	Lucy can correctly match 10 items	while this entry-level vocabulary is a prerequisite for the course.
Math-Related Problems: Sample Definitions		
Environmental Conditions or Task Demands	**Problem Description**	**Typical or Expected Level of Performance**
When shown flashcards with multiplication math facts 0 to 12 for 3 seconds	Annika can answer 57 of 156 correctly	while most peers in her class can name all facts correctly.
When completing a beginning-level algebra word problem	Dennis is unable to translate that word problem into an equation with 1 variable	although this is a prerequisite skill for the course.
Given a 2-term addition or subtraction problem with proper fractions	Franklin (grade 7) cannot correctly solve	although this skill is a Grade 5 Common Core Learning Standard.
On math homework	Neda attempts approximately 60 % of assigned items	while peers typically attempt 90% or more of items.

2. **Select a hypothesis to explain the academic skill or performance problem.** The hypothesis states the assumed reason(s) or cause(s) for the student's academic problems. Once selected, the hypothesis acts as a compass needle, pointing toward interventions that most logically address the student academic problems. Listed below are common reasons for academic problems. Note that occasionally more than one hypothesis may apply to a particular student (e.g., a student may demonstrate a skill deficit as well as a pattern of escape/avoidance).

Academic Problems: Possible Hypotheses & Recommendations	
Hypothesis	Recommendation
• *Skill Deficit.* The student has not yet acquired the skill(s).	Provide direct, explicit instruction to acquire the skill. Reinforce the student for effort and accuracy.
• *Fluency Deficit.* The student has acquired the skill(s) but is not yet proficient.	Provide opportunities for the student to practice the skill and give timely performance feedback. Reinforce the student for fluency as well as accuracy.
• *Retention Deficit.* The student can acquire the skill(s) but has difficulty retaining it over an extended period.	Give the student frequent opportunities for practice to entrench a skill and help the student to retain it over time. Begin by scheduling more numerous practice episodes within a short time ('massed review') to promote initial fluency and then strengthen longer-term skill retention by scheduling additional periodic review ('distributed review') across longer spans of several weeks or more.
• *Endurance Deficit.* The student can perform the academic task(s), but only for brief periods.	• Provide scaffolding supports to help the student to perform the academic task. • In structuring lessons or independent work, gradually lengthen the period of time that the student spends in skills practice or use. • Have the student self-monitor active engagement in skill-building activities--setting daily, increasingly ambitious work goals and then tracking whether he or she successfully

	reaches those goals.
• *Generalization Deficit.* The student possesses the skill(s) but fails to use across appropriate situations or settings.	• Enlist adults to prompt and remind the student to use the target skills when needed. • Train the student to identify relevant characteristics of situations or settings when the skill should be used—and to self-monitor skill use. • Provide incentives (e.g., praise, rewards) for the student to use the skill in the appropriate settings.
• *Escape/Avoidance.* The student seeks to escape or avoid the academic task. NOTE: This category includes "learned helplessness".	• Adjust the work to the student's ability level. • Use scaffolding and accommodation strategies to make the academic work more manageable, e.g., breaking larger tasks into smaller increments ("chunking"), allowing the student to take brief breaks during work sessions, etc.

References

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Identifying Academic Problems in the Classroom: A Guide for Teachers

Directions: When students struggle to complete in-class and homework assignments, teachers can find it difficult to pinpoint the likely cause of the problem. The table below contains 8 common reasons why students might experience academic difficulty. Educators can use the table as a tool to quickly identify obstacles to student learning as well as to find suggestions to help the learner and to measure the impact of their academic-intervention efforts.

NOTE: Many of the causes for student underperformance contained here require that you first rule out competing explanations before you can accept them. For example, if a teacher believes that a student fails to complete classwork because of a lack of confidence/work avoidance (explanation 8), that instructor must first rule out the alternative explanation that the student simply lacks the skills to do the assignment.

Reason for Academic Problem	What It Looks Like	How to Respond	How to Measure: Sample Ideas
1. *Skill.* The student is unable to do the academic work.	• All information sources (direct observation, work products, past records) indicate the student lacks the necessary skill(s) to do the work.	• Actively teach the target skill(s). • Give the student models of correct performance to consult as needed (e.g., correctly completed math problems on board). • Provide timely feedback about correct performance. Offer praise and encouragement for effort.	• Select any method for data collection that provides direct, observable evidence of the student's mastery of the academic skills being taught: e.g., teacher-made quizzes; rubrics; work products, etc.
2. *Fluency.* The student possesses the necessary academic skills but lacks fluency in completing the work.	• The student can complete the work but is inefficient, requiring substantially more time than classmates to do so. The student may also be committing large amounts of cognitive energy to the basic task, preventing them from focusing on higher-level problem-solving or comprehension.	• Provide opportunities for the student to practice the skill and receive timely performance feedback. • Reinforce the student for fluency as well as accuracy.	• Administer brief, timed measures to track growth in speed and efficiency. NOTE: Curriculum-based measures (CBM's) (e.g., Oral Reading Fluency) are useful tools to track fluency in basic academic skills.
3. *Retention.* The student appears to have mastered the necessary academic skill(s) in one session but does not retain the skill(s) until the next session.	• The student demonstrates success on an academic task (e.g., correctly recalling a set of math facts from memory) but on a following day cannot repeat this same task.	• Give the student multiple opportunities to drill on and 'over-practice' the skill.	• Track student mastery of academic items (e.g., basic math facts) using a Cumulative Mastery Record.

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4. *Generalization.* The student possesses the necessary academic skill(s) but fails to recognize opportunities when they should use those skills.	• The teacher has evidence that the student possesses specific academic skills (e.g., reading comprehension techniques; an efficient note-taking strategy). However, the student fails to use those skills in appropriate situations or settings.	• Identify situations/settings in which the student should use the missing skills ('skills transfer') • Select a method (e.g., adult prompt; self-monitoring with a checklist) through which the student is alerted to apply those missing skills in the new setting.	• Choose those target situations/settings to which the student should generalize specific skills. • In those situations/settings, tally the number of times the student both (1) successfully displays the target skill(s), and (2) fails to display those skills.
5. *'Academic Survival' Skills.* The student's lack of academic survival skills (e.g., homework regimen; organizational skills) interferes with their completing and submitting work.	• The student's ability to complete assigned work is compromised because they are disorganized, manage time poorly, lack a strong study-skills or homework regimen, or have other survival-skill deficits.	• Identify the specific area(s) of academic survival skills that are lacking. • Create a skills-checklist for each. • Use this checklist to teach the survival skill steps. Consider having the student then use the checklist to self-monitor performance.	• For each academic survival skill that is lacking, create a checklist describing each recommended step or element. • Periodically use the checklist to track those elements that the student is now successfully carrying out. (Methods to verify student success on checklist elements might include interview, direct observation, examination of work products, etc.).
6. *Overprompting.* The student completes the work—but requires high rates of adult prompting during the task.	• The student does not complete the task without frequent prompting from adults (e.g., gestural prompt; verbal prompt; modeling prompt; manual prompt).	• A goal in reducing use of adult prompts is shift from more-intensive to less-intensive prompt types. For example, if a student requires that the teacher demonstrate the skill (modeling), that teacher may set as a goal that the student will instead be able to complete the task with a less-intensive verbal prompt. Once the student responds to verbal prompts, the teacher might provide	• During each session, record the number and types of prompt (e.g., gestural; verbal; modeling; manual) used to elicit student work. • The goal over time is to see (1) a replacement of more-intensive with less-intensive adult prompts and (2) an overall reduction in the number of prompts required to complete the work.

		the student with a checklist outlining steps to follow and simply point to the checklist (gestural prompt) to encourage the student to complete the task.	
7. *Overhelping.* The student has the ability to complete the work—but seeks repeated assistance during the task.	• The student seeks frequent adult help on the assignment even though all signs indicate that the student has the ability to do the work independently.	• Ensure that the student has any supports that will increase confidence during independent work (e.g., completed work models to review; understanding of what fix-up strategies to apply when stuck, etc.). • Assign a fixed number of 'help requests' that the student can make (e.g., 3) during each work session. (Note: Consider also giving the student incentive NOT to use all help requests by allowing them to 'cash in' unused help requests for points, prizes, privileges, or rewards.)	• Tally the number of help requests that the student makes during each independent-work session.
8. *Lack of Confidence/Work Avoidance.* The student possesses the necessary academic skills but lacks sufficient confidence to attempt the work.	• The student has the foundation skills to undertake the academic work—but displays an attitude of 'learned helplessness' that undermines confidence and work performance.	• Adjust the work to the student's ability level. • Use scaffolding and accommodation strategies to make the academic work more manageable, e.g., breaking larger tasks into smaller increments ("chunking"), allowing the student to take brief breaks during work sessions, creating a work plan for multi-session assignments, using checklists to outline multi-step cognitive strategies such as math problem-solving, etc.	• Track information about quality, completion, and speed of academic work: e.g., percentage of assignments turned in; number of items attempted on completed assignments; time-log tracking length of time required to complete an assignment.

Classroom Data Tools: What Are They and What Can They Measure?

When a teacher wants to monitor a student's progress on a classroom academic intervention, the instructor will (1) decide what data 'channel' to use to collect that data, and then (2) select a data tool designed to capture the desired information. Here are those steps:

Step 1: Select a Data 'Channel'. While there are many ways to collect data to monitor student academic performance, virtually all information is gathered through one of four general 'data channels': direct observation, interviews, work products, or self-monitoring.

- *Direct observation.* The evaluator watches the student engaged in the academic task and records significant behaviors observed during that observation.
- *Interviews.* The evaluator talks with the student and/or adults familiar with the student to collect useful information about the student's academic performance.
- *Work products.* The evaluator reviews completed student work (e.g., in-class or homework assignments, quizzes and tests, etc.) to draw conclusions about that student's academic performance.
- *Self-monitoring.* The student collects information about his or her own academic performance and shares that data with the evaluator.

The four channels described here give teachers access to vital information on student performance. However, it is likely that the data the teacher collects across multiple situations will be highly variable and subjective—unless that instructor makes an effort to collect information in a structured, consistent format over time.

For example, a teacher might *observe* a student weekly during independent work to monitor whether the learner is consistently applying all steps of an academic strategy. If the teacher simply jots down random notes during these observations, the information collected will probably vary considerably across time, depending on what the teacher decides to include in his notes on any given day. If instead, however, the teacher uses a checklist that includes the essential steps in the academic strategy, that instructor's observations are far more likely to record accurately and consistently what steps in the strategy the student actually uses.

Checklists, rubrics, and other tools can transform information collected via observation, interviews, work products, or self-monitoring into objective formative data that can be charted over time to track the outcomes of classroom interventions.

Step 2: Select a Data Tool. Teachers have a variety of tools that they can access to collect behavioral or academic information and monitor classroom interventions. This 'look-up' chart provides a review of the most common data sources and what they can measure:

Data Tool	What It Is	What It Can Measure
Archival Data	Existing data routinely collected by schools that provides useful ongoing information about the student's academic or behavioral performance.	- Attendance - Office disciplinary referrals - Other aspects of behavior or academic performance captured in the school database

Behavior Report Cards	A teacher-created rating scale that measures student classroom behaviors. A behavior report card contains 3-4 rating items describing goal behaviors. Each item includes an appropriate rating scale (e.g., Poor-Fair-Good). At the end of an observation period, the rater fills out the report card as a summary snapshot of the student's behavior.	• General behaviors (e.g., complies with teacher requests; waits to be called on before responding) • Academic 'enabling' behaviors (e.g., has all necessary work materials; writes down homework assignment correctly and completely, etc.)
Checklists	The dividing of a larger behavioral task or sequence into constituent steps, sub-skills, or components. Each checklist element is defined in a manner that allows the observer to make a clear judgment (e.g., YES/NO, COMPLETED/NOT COMPLETED) about whether the student is displaying it.	• Step-by-step cognitive strategies • Behavioral routines • Generalization: Target behavior carried out across settings
Cumulative Mastery Records	A cumulative record of the student's acquisition/mastery of a defined collection of academic items such as multiplication math facts. This record is updated after every intervention session.	• Any discrete collection of academic items to be mastered: e.g., vocabulary, math facts, spelling words, letter or number names
Curriculum-Based Measures/ Assessment	A series of brief measures of basic academic skills given under timed conditions and scored using standardized procedures. CBM/CBA measures often include research-derived benchmark norms to assist in evaluating the student's performance.	• Speed and accuracy in basic academic skills: e.g., letter naming, number naming, number sense, vocabulary, oral reading fluency, reading comprehension (maze), production of writing, math fact computation
Grades	Represent in letter or number form the teacher's formal, summary evaluation of the student's academic performance on an assignment, quiz, test, or longer span of evaluation.	• Homework grades • Test grades • Quarterly report card grades
Logs	Written adult or student entries that track the frequency (and additional relevant details) of relevant academic performance and/or behaviors.	• Homework completion • Incidents of non-compliance • Student record of dates when he or she uses a self-guided academic intervention. • Listing of student-teacher meetings.
Rubrics	An instrument designed to measure a student on complex tasks. In a rubric, the teacher defines the categories that make up the important dimensions of a task, develops written exemplars representing mastery for each dimension, and creates a rating scale to be used in evaluating a particular student's work for each dimension.	• Any complex, multi-dimensional task: e.g., participation in a discussion; writing a research paper; preparing and presenting a PowerPoint; completing and documenting a science lab project, etc.
Work Products	Student work that reflects performance on a series of similar in-class or homework	• Work completion • Work accuracy

	assignments (e.g., successive writing assignments or ongoing math homework). A work product is selected because it can reflect growth in the intervention target skill(s). The element(s) of the work product being tracked can be objectively measures and converted to numeric data (e.g., percentage of problems completed).	• Written evidence of problem-solving steps • Quality of student work (e.g., on writing assignments)

How to Monitor Student Progress on Tier 1/Classroom Interventions

If you are a teacher who wants to put a classroom academic or behavioral intervention plan in place for a struggling student, you will want to collect data on that intervention so that you can judge its effectiveness. After all, no one wants to commit time and effort to an intervention that is ineffective.

Your goal of interventions in Tier 1 (general-education instructional settings) is to provide academic and/or behavioral support that will allow your target student to be successful in core instruction. The kinds of data that you choose to monitor that student's progress will, of course, depend on what you wish to measure. However, any assessment that you choose should be a valid measure of the behavior or academic skill that is the focus of the intervention, able to accurately record short-term student gains, and feasible to collect in a busy classroom.

This article walks you through a 7-step process to create and carry out a plan to monitor student progress for any teacher-created classroom intervention:

STEP 1: What is the skill or behavior that you are measuring? The initial step in setting up your plan to monitor a student is to choose a specific skill or behavior to measure. This 'problem-identification' statement should define the skill or behavior in clear, specific terms. Here are some examples:

Problem-Identification Statements: Examples
HOMEWORK. Russell does not turn in homework.
WRITING. Andrea's writing includes many incomplete sentences.
MATH FACTS. Rick is not fluent in multiplication math facts.
BEHAVIOR. Angela is inattentive in large-group instruction.

STEP 2: What data-collection method will best measure your target skill or behavior? Your next objective is to select a valid, reliable, and manageable way to collect data on the skill or behavior that you have targeted for intervention. You have a range of data-collection tools to choose from, such as rubrics, checklists, Daily Behavior Report Cards (DBRC), Curriculum-Based Measures (CBMs), teacher logs, etc. Here are examples of data collection methods selected to match specific student problems:

Data Collection Methods: Examples	
Problem ID Statement	*Sample Data Tool*
HOMEWORK. Russell does not turn in homework.	Homework log
WRITING. Andrea's writing includes many incomplete sentences.	Writing Sample: Compute percentage of complete sentences.
MATH FACTS. Rick is not fluent in multiplication math facts.	Curriculum-based measurement: 2-minute math computation worksheets in 0-12 multiplication
BEHAVIOR. Angela is inattentive in large-group instruction.	Daily Behavior Report Card

NOTE: For a more complete review of tools for data collection, see the article *Classroom Data Tools: What Are They and What Can They Measure?* appearing elsewhere in this document.

STEP 3: How long will your intervention last? When planning your classroom intervention, you should determine an end-date when you can review your progress-monitoring data and decide whether the intervention is successful. A good practice is to run your intervention for at least 6-8 instructional weeks before evaluating its effectiveness. Student data can vary significantly from day to day: allowing 6-8 weeks for data collection permits you to collect sufficient data points to have greater confidence when judging the intervention's impact.

STEP 4: What is the student's baseline performance? Before launching your intervention, you will first use your selected data-collection tool to record baseline data reflecting the student's current performance in the skill or behavior that you are measuring. Baseline data represents a starting point that permits you to calculate precisely any progress the student makes during the intervention. Because student data can be variable, however, you should strive whenever possible to collect at least 3 baseline data points before starting your intervention. Here are examples of baseline data:

Baseline Data: Examples		
Problem ID Statement	*Sample Data Tool*	*Baseline Data*
HOMEWORK. Russell does not turn in homework.	Homework log	Russell turned in homework on 20 percent of days when homework was assigned. [Data source: percentage homework completion calculated from 1 week of homework log entries.]
WRITING. Andrea's writing includes many incomplete sentences.	Writing Sample: Compute percentage of complete sentences.	On Andrea's writing samples, an average of 40 percent of sentences are found to be incomplete. [Data source: median value of 3 writing samples collected on different days]
MATH FACTS. Rick is not fluent in multiplication math facts.	Curriculum-based measurement: 2-minute math computation worksheets	Rick calculates an average of 29 correct digits in 2 minutes on a 0-12 multiplication math-fact worksheet. [Data source: median value of 3 CBM worksheets collected on different days.]
BEHAVIOR. Angela is inattentive in large-group instruction.	Daily Behavior Report Card	On a DBRC item *"The student requires no more than 1 redirect for inattention during the class period"*, the teacher rates this item 'YES' during 1 of 5 days (20 percent). [Data source: percentage calculated from 5 days of DBRC data collection.]

STEP 5: What is the student's outcome goal? You will next set an outcome goal that describes how the student is expected to perform on the target skill or behavior if the intervention is successful (e.g., after 6-8 weeks). Setting a specific outcome goal for the student is a critical step, as it allows you to judge the intervention's effectiveness.

Here are examples of outcome goals:

Outcome Goal: Examples

Problem ID Statement	Sample Data Tool	Outcome Goal
HOMEWORK. Russell does not turn in homework.	Homework log	Russell will turn in at least 80 percent of assigned homework. [Data source: percentage homework completion calculated from final week of homework log entries.]
WRITING. Andrea's writing includes many incomplete sentences.	Writing Sample: Compute percentage of complete sentences.	On Andrea's writing samples, at least 90 percent of attempted sentences will be correct and complete. [Data source: median value of final 3 writing samples]
MATH FACTS. Rick is not fluent in multiplication math facts.	Curriculum-based measurement: 2-minute math computation worksheets	Rick will calculate an average of 49 correct digits in 2 minutes on a 0-12 multiplication math-fact worksheet. [Data source: average of final 2 CBM worksheets.]
BEHAVIOR. Angela is inattentive in large-group instruction.	Daily Behavior Report Card	On a DBRC item *"The student requires no more than 1 redirect for inattention during the class period"*, the teacher will rate this item 'YES' during at least 4 of 5 days (80 percent). [Data source: percentage calculated from final 5 days of DBRC data collection.]

You can use several sources to calculate an outcome goal:

- *CBMs.* If you are using academic CBMs with benchmark norms, those grade-level norms can help you to set a goal for the student.

- *Classroom Norms.* If you are measuring a skill for which you lack benchmark norms, you may instead be able to compile classroom norms (i.e.., sampling your entire class or a subgroup of your class) and use those group norms to set an outcome goal. For example, a teacher with a student who frequently writes incomplete sentences might collect writing samples from a small group of 'typical' student writers in the class, analyze those samples to calculate percentage of complete sentences, and use this peer norm (e.g., 90 percent complete sentences) to set a sentence-writing outcome goal for that struggling writer.

- *Teacher-Defined Performance Goal (Criterion Mastery).* Sometimes, you must write an outcome goal—but will have access to neither benchmark norms nor classroom norms for the skill or behavior you are trying to measure.

  In this case, you can always rely on your own judgment to define a meaningful outcome goal. For example, a math instructor wishes to teach a student to follow a 7-step procedural checklist when solving math word problems. The data source in this example is a checklist, and the teacher sets as the outcome goal that—when given a word problem—the student will independently follow all steps in the teacher-supplied checklist in the correct order.

TIP: For a student with a large academic deficit, you very likely will not be able to close that skill-gap entirely within one 6-8-week intervention cycle. In this instance, you should instead set an ambitious 'intermediate goal' that, if accomplished, will demonstrate that your student is clearly closing the academic gap with peers. It is not unusual for

students with substantial academic delays to require several successive intervention-cycles with intermediate goals before they are able to close the skill-gap sufficiently to bring them up their grade-level peers.

STEP 6: How often will you collect data? The more frequently you collect data, the more quickly you will be able to judge whether an intervention is effective (Filderman & Toste, 2018). This is because more data points make trends of improvement easier to spot and increase your confidence in the pattern that the data is showing you. Ideally, you should collect data at least weekly for the duration of the intervention period. If that is not feasible, you will want monitor student progress no less than twice per month.

STEP 7: How does the student's actual performance compare with the outcome goal? Once you have created your progress-monitoring plan for the student, you will put that plan into action. At the end of the pre-determined intervention period (e.g., in 6 weeks), you will review the student's cumulative progress-monitoring data, compare it to the outcome goal, and judge the effectiveness of the intervention. Here are your decision rules:

- *Outcome goal met.* If your student meets the outcome goal, you will judge the intervention a success. You may decide that the intervention is no longer necessary and discontinue. Or you may choose to continue the present intervention for an additional period because the student still appears to benefit from it.

- *Clear progress but outcome goal not met.* If your student fails to meet the outcome goal, but you see clear signs that the student is making progress, you might decide that the intervention shows promise. In this case, your next step would be to change the existing intervention in some way(s) to intensify its effect. For example, you could meet more frequently with the student, meet for longer sessions, shrink the group size (if the intervention is group-based), etc.

- *Little or no progress observed.* If your student fails to make meaningful progress on the intervention, your logical next step will be to replace the current intervention plan with a new strategy.

References

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How to Track Use of Adult Prompts on Academic Tasks

When students acquire new academic skills, they often require a transitional phase of teacher prompts to successfully perform those skills. For example, a student completing a worksheet might initially need one or more of these prompts to start that worksheet:

1. Gestural prompt: The teacher points to the sheet as a signal for the student to begin;
2. Verbal prompt: The teacher says, "Angela, begin your worksheet.";
3. Modeling prompt: The teacher demonstrates the steps to completing the worksheet;
4. Manual prompt: The teacher physically guides the student's hand holding the pen to successfully complete an item on the worksheet.

Table 1 defines the types of teacher prompts most frequently used in classrooms. Those prompts are ranked bottom-to-top in ascending order of intensity. For example, a verbal prompt is considered to be less intensive than a modeling prompt.

Table 1: Prompt Types (MacDuff et al., 2001)	
Manual Prompt	The student is guided manually to complete the skill. Guiding the student's hand to write letters on a worksheet is an example of a manual ('hand-over-hand') prompt. A partial manual prompt (e.g., the teacher guiding the student manually through only part of the task) is counted as a manual prompt.
Modeling Prompt	The student views a demonstration of the skill (e.g., demonstrated in person or via a video recording). Partial modeling (e.g., the teacher demonstrating a single step of a multi-step task) is counted as a modeling prompt.
Verbal Prompt	The student is prompted via verbal communication to demonstrate the skill. Verbal prompts can consist of a single word or several consecutive sentences. Encouragement and praise whose goal is to get the student to begin the task are considered verbal prompts.
Gestural Prompt	The student is prompted via a gesture (e.g., nodding, pointing, motioning, tapping on a worksheet) to complete the skill.
No Prompt	The student requires no prompting to complete the skill.

Prompts are a valuable tool to transition students to task-independence. However, students can sometimes remain 'stuck' continually, requiring teacher prompts—while failing to master independence in the target skill. In this situation, an appropriate intervention goal would be to systematically fade use of prompts.

This document presents a process and accompanying forms that teachers can use monitor progress toward task-independence—by tracking the type and number of prompts required for student performance. For example, a teacher has a student, Rodney, who requires significant and consistent prompting before he will start independent work on a multiplication math-fact worksheet. Figure 1, below, displays a completed section of Rodney's *Student Prompts Recording Form*. (A blank version of the form appears later in this document.) The teacher observes Rodney and uses this form to keep a log of the number and kinds of prompts the student requires each session to start his math-fact work.

Figure 1: Sample *Student Prompts Recording Form* Entry

1   DATE: M T W Th F ___Oct 22, 2018___   NOTES: Rodney hesitated in starting his math worksheet. I pointed to the sheet--encouraged Rodney to start his work--showed him how to complete a sample problem. Then he started.

| No Prompt | **1** Gestural | **2** Verbal | **1** Modeling | Manual |

As Figure 1 shows, the teacher moves through a sequence of less-intensive to more-intensive prompts, until finding success with a modeling prompt. The instructor records comments to describe the prompting sequence that she uses. Just as importantly, the teacher tabulates the number of attempts she makes with each prompt type. For example, this instructor attempts 2 verbal prompts before resorting to a modeling prompt. This frequency data can be charted over time as a way to measure progress in fading teacher prompts.

Figure 2 displays an excerpt from the *Student Prompts Progress-Monitoring Chart*, a blank version of which appears later in this write-up. This chart allows teachers to summarize prompting data across multiple days to look for possible trends of improvement. In this example, the teacher has charted a week's worth of data on her use of prompts with Rodney.

Figure 2: Sample *Student Prompts Progress-Monitoring Chart* Entries

Prompt Chart: Series/Week 1 for Rodney

	Oct 22	Oct 23	Oct 24	Oct 25	Oct 26
Manual					
Modeling	1				
Verbal	2	2	1		
Gestural	1	1	1	1	
No Prompt					1
	Date	Date	Date	Date	Date

A look at the chart shows clear progress in fading use of prompts. By day 2, verbal prompts replace modeling; by day 4, a simple pointing (gestural) prompt is sufficient for Rodney to begin his math-fact worksheet; by day 5, Rodney initiates his independent work without needing any teacher prompts.

Reference: MacDuff, G. S., Krantz, P. J., & McClannahan, L. E. (2001). Prompts and prompt-fading strategies for people with autism. In C. Maurice, G. Green, & R. M. Foxx (Eds.), *Making a difference: Behavioral intervention for autism* (pp. 37-50). Austin, TX, US: PRO-ED.

Student Prompts Recording Form

Student: _____ **Teacher:** _____

Target Task/Behavior. Describe the task/behavior that you are targeting to reduce/eliminate task-initiation prompts.

_____

Prompt Definitions. Use these definitions to classify the types of prompts you use with your student.

Prompt Types. (MacDuff et al., 2001)	
Manual	The student is guided manually to complete the skill.
Modeling	The student views a demonstration of the skill (e.g., demonstrated in person, via a video recording).
Verbal	The student is prompted via verbal communication to demonstrate the skill.
Gestural	The student is prompted via a gesture (e.g., nodding, pointing, motioning, tapping on a worksheet) to complete the skill.
No Prompt	The student requires no prompting to complete the skill.

Prompt Recording. In the sections below, record your use of task-initiation prompts to initiate the identified task/behavior. Write observation dates, number and type of prompts used, and notes explaining your prompt use.

1 DATE: M T W Th F_____ NOTES: _____

_____

No Prompt   Gestural   Verbal   Modeling   Manual

2 DATE: M T W Th F_____ NOTES: _____

No Prompt   Gestural   Verbal   Modeling   Manual

3 DATE: M T W Th F_____ NOTES: _____

No Prompt   Gestural   Verbal   Modeling   Manual

4 DATE: M T W Th F_____ NOTES: _____

No Prompt   Gestural   Verbal   Modeling   Manual

5 DATE: M T W Th F_____ NOTES: _____

No Prompt   Gestural   Verbal   Modeling   Manual

Student Prompts Progress-Monitoring Chart

Student: _____   Teacher: _____

Directions. Use this chart to record/summarize entries from the *Student Prompts Recording Form.*

Prompt Chart: Series/Week ___

Manual	☐	☐	☐	☐	☐
Modeling	☐	☐	☐	☐	☐
Verbal	☐	☐	☐	☐	☐
Gestural	☐	☐	☐	☐	☐
No Prompt	☐	☐	☐	☐	☐
	Date	Date	Date	Date	Date

Prompt Chart: Series/Week ___

Manual	☐	☐	☐	☐	☐
Modeling	☐	☐	☐	☐	☐
Verbal	☐	☐	☐	☐	☐
Gestural	☐	☐	☐	☐	☐
No Prompt	☐	☐	☐	☐	☐
	Date	Date	Date	Date	Date

Prompt Chart: Series/Week ___

Manual	☐	☐	☐	☐	☐
Modeling	☐	☐	☐	☐	☐
Verbal	☐	☐	☐	☐	☐
Gestural	☐	☐	☐	☐	☐
No Prompt	☐	☐	☐	☐	☐
	Date	Date	Date	Date	Date