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RTI Toolkit: A Practical Guide for Schools

Motivating Students: A Classroom Toolkit

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How To: Implement Strong Core Instruction

Teacher: Date: Class/Lesson:

The checklist below summarizes the essential elements of a supported-instruction approach. When preparing lesson plans, instructors can use this resource as a 'pre-flight' checklist to make sure that their lessons reach the widest range of diverse learners.

1. Increase Access to Instruction

Instructional Element	Notes
☐ **Instructional Match.** Lesson content is appropriately matched to students' abilities (Burns, VanDerHeyden, & Boice, 2008).	
☐ **Content Review at Lesson Start.** The lesson opens with a brief review of concepts or material that have previously been presented. (Burns, VanDerHeyden, & Boice, 2008, Rosenshine, 2008).	
☐ **Preview of Lesson Goal(s).** At the start of instruction, the goals of the current day's lesson are shared (Rosenshine, 2008).	
☐ **Chunking of New Material.** The teacher breaks new material into small, manageable increments, 'chunks', or steps (Rosenshine, 2008).	

2. Provided 'Scaffolding' Support

Instructional Element	Notes
☐ **Detailed Explanations & Instructions.** Throughout the lesson, the teacher provides adequate explanations and detailed instructions for all concepts and materials being taught (Burns, VanDerHeyden, & Boice, 2008).	
☐ **Think-Alouds/Talk-Alouds.** When presenting cognitive strategies that cannot be observed directly, the teacher describes those strategies for students. Verbal explanations include 'talk-alouds' (e.g., the teacher describes and explains each step of a cognitive strategy) and 'think-alouds' (e.g., the teacher applies a cognitive strategy to a particular problem or task and verbalizes the steps in applying the strategy) (Burns, VanDerHeyden, & Boice, 2008, Rosenshine, 2008).	
☐ **Work Models.** The teacher makes exemplars of academic work (e.g., essays, completed math word problems) available to students for use as models (Rosenshine, 2008).	
☐ **Active Engagement.** The teacher ensures that the lesson engages the student in 'active accurate responding' (Skinner, Pappas & Davis, 2005) often enough to capture student attention and to optimize learning.	

☐ **Collaborative Assignments.** Students have frequent opportunities to work collaboratively--in pairs or groups. (Baker, Gersten, & Lee, 2002; Gettinger & Seibert, 2002).	
☐ **Checks for Understanding.** The instructor regularly checks for student understanding by posing frequent questions to the group (Rosenshine, 2008).	
☐ **Group Responding.** The teacher ensures full class participation and boosts levels of student attention by having all students respond in various ways (e.g., choral responding, response cards, white boards) to instructor questions (Rosenshine, 2008).	
☐ **High Rate of Student Success.** The teacher verifies that students are experiencing at least 80% success in the lesson content to shape their learning in the desired direction and to maintain student motivation and engagement (Gettinger & Seibert, 2002).	
☐ **Brisk Rate of Instruction**. The lesson moves at a brisk rate--sufficient to hold student attention (Carnine,1976; Gettinger & Seibert, 2002).	
☐ **Fix-Up Strategies.** Students are taught fix-up strategies (Rosenshine, 2008) for use during independent work (e.g., for defining unknown words in reading assignments, for solving challenging math word problems).	

3. Give Timely Performance Feedback

Instructional Element	Notes
☐ **Regular Feedback.** The teacher provides timely and regular performance feedback and corrections throughout the lesson as needed to guide student learning (Burns, VanDerHeyden, & Boice).	
☐ **Step-by-Step Checklists.** For multi-step cognitive strategies, the teacher creates checklists for students to use to self-monitor performance (Rosenshine, 2008).	

4. Provide Opportunities for Review & Practice

Instructional Element	Notes
☐ **Spacing of Practice Throughout Lesson.** The lesson includes practice activities spaced throughout the lesson. (e.g., through teacher demonstration; then group practice with teacher supervision and feedback; then independent, individual student practice) (Burns, VanDerHeyden, & Boice).	

☐ **Guided Practice.** When teaching challenging material, the teacher provides immediate corrective feedback to each student response. When the instructor anticipates the possibility of an incorrect response, that teacher forestalls student error through use of cues, prompts, or hints. The teacher also tracks student responding and ensures sufficient success during supervised lessons before having students practice the new skills or knowledge independently (Burns, VanDerHeyden, & Boice, 2008).	
☐ **Support for Independent Practice.** The teacher ensures that students have adequate support (e.g., clear and explicit instructions; teacher monitoring) to be successful during independent seatwork practice activities (Rosenshine, 2008).	
☐ **Distributed Practice.** The teacher reviews previously taught content one or more times over a period of several weeks or months (Pashler et al., 2007; Rosenshine & Stevens, 1995).	

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Mindsets: The Power to Help or Hinder Student Motivation

Motivation is central to student academic achievement. And research shows that there is one crucial factor that greatly impacts academic engagement and performance: whether a student has a 'fixed' or 'open' mindset (Dweck, 2006). Students with a _fixed mindset_ view intelligence, or general ability, as having a fixed upward limit. Viewed from this perspective, accomplishments are explained largely by one's intellectual potential, with effort playing only a minor role. In contrast, students with a _growth mindset_ see intelligence as 'malleable': they have faith that increased effort will result in more effective learning and accomplishment. When growth-mindset learners are challenged by academic tasks, they interpret these struggles as "an opportunity for growth, not a sign that a student is incapable of learning" (Paunesku et al., 2015; p. 785).

Why should teachers be concerned about students having a fixed mindset? When such students encounter difficulty or setbacks, they are likely to respond by becoming discouraged, withdrawing effort, or even giving up entirely. Of even more concern, a fixed mindset can result in learners 'disidentifying' with (i.e., disengaging from) those academic subjects or tasks that they find difficult. Research indicates that rates of cheating may also be higher among students with a fixed mindset (Blackwell, Trzesniewski & Dweck, 2007).

Yet students with a growth mindset have a much more positive reaction to setbacks. When they experience difficulty with schoolwork, they respond by viewing the setback as an opportunity to learn, putting more effort into mastering the task, and analyzing where their work or study processes fall short and correcting them. It's no surprise, then, that--because growth-mindset learners remain optimistic and engaged in the challenging task-- they are likely to be successful (Blackwell, Trzesniewski & Dweck, 2007).

Teachers have an important role to play in promoting a growth mindset among their students. First and foremost, instructors should take care not to use statements in their classrooms that reinforce a fixed-mindset. For example, a teacher who says "Excellent essay, Rebecca. You are a natural-born writer!" is implying that writing is an innate talent, immune to skill-building. Similarly, when an instructor responds to the student with a poor math-test grade, "That's OK. Not everyone is good at math", the educator has suggested that "math ability" is a fixed quantity that cannot expand much despite the learner's efforts.

On the other hand, when instructors structure their statements of praise, process feedback, and encouragement to reflect a growth-mindset attitude, even learners with a habitual negative fixed-mindset attitude can receive a boost of optimism and motivation. 'Growth mindset' statements can be as varied as the educators, students, and situations they address. However, they typically:

- lay out a specific process for moving forward.

- recognize difficulties or struggles to be faced and frame them as opportunities to learn.

- convey optimism that the student can and will move toward success if the learner puts in sufficient effort, follows the recommended process, and makes appropriate use of any 'help' resources.

In their day-to-day communication with students, instructors have many opportunities to craft statements according to growth-mindset principles. Below is a sampling of statements--praise, work-prompts, encouragement, introducing of assignments-- that teachers can use to foster motivation in their classrooms:

Praise

Effective teacher praise has two elements: (1) a description of noteworthy student academic performance or general behavior, and (2) a signal of teacher (Hawkins & Hellin, 2011). Because this 'process praise' ties performance directly to effort, it reinforces a growth mindset in students who receive it. Here is an example of process praise:

"Your writing is improving a lot. The extra time you put in and your use of an outline has really paid off."

Work-Prompt

When students stop working during an independent assignment, the teacher can structure the "get-back-to-work" prompt to follow a growth-mindset format. An example of such a work prompt is:

"Sarah, please keep reading....you still have 10 minutes to work on the assignment. It's a challenging passage, so if you get stuck, be sure to use your reading fix-up skills. Remember, it's also OK to ask a neighbor or to come to me for help. Use your strategies and you WILL be successful!"

Note in this example how the teacher directs the student to resume the assignment, acknowledges the challenging nature of the work, reminds her to use her fix-up strategies and that she has the option to seek peer and teacher assistance, and ends by linking effort to a positive outcome.

Encouragement

Students can become discouraged if they are unsuccessful on an academic task or receive a low test or quiz grade. The teacher can respond with empathy, while also framing the situation as a learning opportunity, describing proactive steps to improve the situation, and expressing confidence in the learner. An example of growth-mindset encouragement is:

"I can see that you didn't do as well on this math test as you had hoped, Luis. Let's review ideas to help you to prepare for the next exam. If you are willing to put in the work, I know that you can raise your score."

Introducing Assignments

The teacher can make assignment directions motivating by giving them a growth-mindset spin--describing the challenge(s), offering a realistic appraisal of the effort that will be required, reminding learners of the strategies or steps to apply, and closing with a confident statement tying methodical effort to success. Here is an example:

"You should plan spend at least an hour on tonight's math homework. When you start the assignment, some problems might look like they are too difficult to solve. But if you give it your best and follow your problem-solving checklist, you should be able to answer them."

Closing Thoughts: Use Growth-Mindset Statements Frequently. Instructors who want to attain the full motivational benefit of growth-mindset statements should ensure that they use those statements often to promote an optimistic 'can-do' climate. In busy classrooms, teachers may feel so pressed to cover the demanding curriculum that they overlook the need to use growth-mindset statements as a daily motivational tool. They wrongly assume that all students are already adequately motivated to do the expected work. In fact, though, many learners have fallen into a pattern of 'learned helplessness' and choose to withdraw in the face of challenging academics (Sutherland & Singh, 2004).

But the right teacher communication, if sustained, can motivate even students with negative, fixed mindsets to apply their best effort on an assignment or test . Yet research shows that process-praise is often dramatically *underused* in both general- and special-education classrooms--even though it is a prime means of shifting students toward an optimistic view of themselves as learner (Brophy, 1981; Hawkins & Heflin, 2011; Kern, 2007). So, as their own optimistic goal, teachers should adopt the regular use of a variety of growth-mindset statements to promote student achievement.

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How to Help Students Accept Critical Academic Feedback: 'Wise' Feedback

Teachers of middle and high school students know that these learners sometimes require pointed critical feedback on academic assignments to shape their learning. The *reason* that most instructors put substantial effort into providing often-detailed performance feedback is clear: to benefit the student. But many students—particularly those at risk of academic underperformance or failure—may instead misinterpret critical instructional feedback as a sign that the teacher lacks confidence in and is negatively biased toward the learner.

A factor that can contribute to students' negatively skewed view of instructional feedback is that it is often ambiguous, presented without an explicit context for understanding the intention behind it. This ambiguity leaves learners free to impose their own interpretations—for example, regarding a teacher's written or verbal feedback about an assignment as a sign either of caring and commitment or a curt dismissal of the student's abilities (Yeager et al., 2013). And, in fact, there is evidence that a tendency to construe teacher feedback in a negative light is more common among those students already sensitive to being stereotyped because of social characteristics such as race, gender, or economic class (Cohen, Steele, & Ross, 1999; Yeager et al., 2013). An African-American student, for example, might interpret a White teacher's written feedback on how to improve her research-paper draft as picky, unfair, and driven by racial bias rather than as representing a genuine desire to help the learner advance her writing skills. As a result, the student fails to heed and apply that adult feedback.

Wise Feedback: Supplying a Proactive, Empowering Explanation. Teachers can reduce the tendency of at-risk students to discount evaluative statements as biased by formatting those statements as 'wise' feedback (Cohen, Steele, & Ross, 1999; Yeager et al., 2013). The teacher structures written or verbal feedback to include these 3 elements:

- *Feedback description.* The teacher describes the nature of the feedback being offered.
- *High standards.* The teacher emphasizes and explains the high standards used to evaluate the student work and generate the instructional feedback.
- *Assurance of student ability.* The teacher states explicitly that the student has the skills necessary to successfully meet those standards.

The wise-feedback strategy appears deceptively simple but is powerful in application. Wise feedback prevents the student from misconstruing teacher comments as negatively biased by proactively offering an alternative, positive explanation: the teacher is giving detailed, ambitious feedback because the standards of the course are high and the teacher is confident that the student has the skills and motivation to meet them.

Wise Feedback: Examples. Here are 3 examples of teacher critical feedback formatted as 'wise' feedback:

Wise Feedback: Example 1: Research Paper with Written Feedback	
Feedback description	*Your paper met the basic expectations of the assignment but needs work. Please look over my comments.*
High standards	*You will see that I give detailed, critical feedback. This course sets the expectation that you will take your writing to a level suitable for college work.*
Assurance of student ability	*Your past assignments have shown me that you have the skills and motivation to use my feedback to revise and improve your paper.*

Wise Feedback: Example 2: PowerPoint Presentation with Oral Feedback

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Feedback description	*Review the attached rubric and my notes evaluating your recent science PowerPoint presentation.*
High standards	*This PowerPoint is an adequate starting point, but can be made better. Remember the goal for this assignment is to create a presentation that showcases your communication skills to a potential employer.*
Assurance of student ability	*I know from examples in your work portfolio and contributions to class discussion that you will be able to implement my suggestions and increase the quality and persuasiveness of your PowerPoint.*

Wise Feedback: Example 3: Opinion Survey with Written Feedback	
Feedback description	*I have looked over your sample survey form. It is going to need substantial revision, as you will see when you read my comments.*
High standards	*Your task is a challenging one: to develop a political survey that avoids leading questions and potentially biased language.*
Assurance of student ability	*From your previous drafts, I see that you understand the principles of survey development. As you will administer the final version of this survey to classmates, it is important that you use my feedback to polish it and then resubmit for my review.*

Wise Feedback: Additional Considerations. Like all teacher communication tools, wise feedback has constraints attached to its use:

- *Do not pair grades with wise feedback.* When possible, teachers should avoid attaching grades to any student work that contains wise feedback. Students tend to view a summative number or letter grade as the 'real' evaluation of an assignment and are therefore likely to ignore comments that accompany them (Yeager et al., 2013). So grades can 'short-circuit' the positive impact of wise feedback. The reality, however, is that the assignment of grades is usually unavoidable in course work. One strategy to keep wise-feedback and grading separate on an assignment is to return the first draft of the assignment ungraded with wise feedback. The student is then directed to use the feedback to revise the assignment and submit for a grade.

- *Make student feedback 'ambitious'.* In an attempt to bond with unmotivated students, the teacher may commit the errors of over-praising them for mediocre work or providing only easy suggestions for improving the assignment. Either strategy sets a low bar for performance and can backfire. When students sense that instructors have limited expectations of them, they can feel patronized and stereotyped, lose motivation, and further withdraw effort from academic tasks (Yeager et al., 2013). Instead, the teacher should praise work that truly deserves it and offer thoughtful critical feedback that, relative to students' current abilities, taxes them to stretch and expand their skills in a meaningful way.

- *Use wise feedback with large groups.* Although wise feedback is an excellent tool to communicate teacher expectations to individual students, it is just as powerful (and much more efficient) when communicating with the entire class. For example, before handing back graded math tests containing detailed critical feedback, a middle-school math teacher prepares the class, saying:

(High standards) *"By grade 7, students are expected to have fully mastered the many math concepts and operations taught in the earlier grades."*
(Feedback description) *"When you look over this diagnostic math test that you took last week, you will see that I have written a number of comments highlighting where you made errors or failed to show or explain your work."*
(Assurance of student ability) *"Judging by past work that I have seen from each of you, I can see that you all*

have the skills to be strong math students. My comments will point you to where you should put additional effort to ensure success in this course."

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Teacher Communication Tools to Motivate

Teachers communication is a powerful means to boost academic performance. Instructor comments have the ability to boost confidence, focus attention, and engage reluctant learners. Four prime tools in the teacher communication toolbox are change talk, praise, growth-mindset statements, and wise feedback.

Change Talk. Change talk (Miller & Rollnick, 2004) is any statement (or partial statement) that expresses hope, interest in making positive changes, a willingness to try new strategies, or other positive attitudes. When people focus on their own 'change talk', they are more likely to develop and successfully carry out plans to make positive changes in their lives.

Elements of student change talk are often intermixed with expressions of uncertainty, frustration, and doubt. Teachers who are effective listeners listen for 'change talk' (Miller & Rollnick, 2004). In a low-key manner, the educator can then draw attention to that positive change talk, reinforce it, have the student elaborate on it, and thus increase that learner's optimism and confidence (Miller & Rollnick, 2004).

For example, in a teacher conference, the student may say, "**I want to do better in this course** but the work is so hard!" The student's statement includes both positive change talk (the goal of performing better in the course) and a limiting factor (the work is difficult). In conversation, the instructor can strategically draw attention to the student's change talk ("I want to do better in this course") through restatement: e.g., "I am hearing that doing better in the course is important to you" or "So if you could find a way, you would like to do better in the course, right?" This encourages the student to focus on a plan for change rather than on roadblocks preventing change.

Praise. Praise is a type of positive coaching comment. It pinpoints for the student the specific academic or general behavior that is noteworthy and also conveys teacher approval of that behavior (Burnett, 2001). Praise can be thought of as a kind of verbal highlighter, prompting (and reinforcing) the student to engage in *more* of the praised behavior. Praise statements are most effective when they target effort and accomplishment, not general ability. Effective praise consists of two elements:

- DESCRIPTION. The teacher describes in specific terms the noteworthy student academic performance or general behavior to be praised.

- APPROVAL. The teacher signals approval of the student's performance.

Here is a sample praise statement:

- DESCRIPTION. "*Russell, today in class, you wrote non-stop through the entire writing period.*"

- APPROVAL. "*I really appreciate your hard work!*"

Growth Mindset Statements. Research shows that there is one crucial factor that greatly impacts motivation and academic engagement: whether a student possesses a 'fixed' or 'open' mindset (Dweck, 2006). Students with a *fixed mindset* view intelligence, or general ability, as having a fixed upward limit. Viewed from this perspective, effort plays only a minor role in intellectual accomplishment. In contrast, students with a *growth mindset* see intelligence as 'malleable': they have faith that increased effort will result in more effective learning and accomplishment. When fixed-mindset students are challenged by academic tasks, they can easily give up, while, growth-mindset learners interpret academic struggles as "an opportunity for growth, not a sign that a student is incapable of learning" (Paunesku et al., 2015; p. 785).

In their day-to-day communication with students, instructors have many opportunities to craft encouraging statements about schoolwork that can help fixed-mindset learners adopt a more positive, growth-mindset view. These statements contain 3 elements:

- CHALLENGE. The teacher acknowledges that the learning task is difficult—but frames that challenge as an opportunity to learn.

- PROCESS. The teacher identifies the specific process that the student should follow to accomplish the academic task.

- CONFIDENCE. The teacher provides assurance that the student can be successful if the learner puts in sufficient effort and follows the recommended process.

Here is an example of a growth-mindset statement that an instructor uses to encourage a student to continue on an independent reading assignment:

"Sarah, please keep reading. You still have 10 minutes to work on the assignment."

- CHALLENGE. *"Your reading assignment has a lot of advanced vocabulary."*

- PROCESS. *"If you get stuck, be sure to use your reading fix-up skills. Remember, it's also OK to ask a neighbor or to come to me for help. "*

- CONFIDENCE. *"Use your strategies, and you should get through the reading just fine."*

Wise Feedback. Some students—particularly those with a history of academic underperformance or failure—may misinterpret critical instructional feedback as a sign that the teacher lacks confidence in and is negatively biased toward the learner.

An effective way for teachers to reduce the tendency of at-risk students to discount evaluative statements as biased is to format those statements as 'wise' feedback (Yeager et al., 2013). The teacher structures written or verbal feedback to include these 3 elements:

- FEEDBACK DESCRIPTION. The teacher describes the nature of the feedback being offered.
- HIGH STANDARDS. The teacher emphasizes and explains the high standards used to evaluate the student work.
- ASSURANCE OF ABILITY. The teacher states explicitly his or her confidence that the student has the skills necessary to successfully meet those standards.

Here is an example of wise feedback that a teacher wrote on a student writing assignment:

- FEEDBACK DESCRIPTION. "*Your paper met the basic requirements of the assignment but needs work. Please look over my comments. You will see that I give detailed feedback.*"

- HIGH STANDARDS. "*The expectation in this class is that you will take your writing to a level suitable for college or business communication.*"

- ASSURANCE OF ABILITY. "*Your past writing assignments have shown me that you have the skills and motivation to use my feedback to revise and improve this paper.* "

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Teaching Positive Behaviors: The Power of Checklists

Educators frequently need to define positive student behaviors so that they can teach the student to perform them; take data on them; communicate with others about them; and/or encourage the student to monitor them.

Making Behavior Checklists. One useful way to define a goal behavior is to break it down into a series of steps in checklist format. The process of breaking down a larger behavior goal ('task') into individual steps is called a 'task analysis'.

Creating a behavior checklist is straight-forward. Often, you can just analyze the larger task and use common sense to break it down into smaller steps. Sometimes it is also helpful to get the advice of an expert as you prepare your behavior checklist. For example, if you want to create a checklist that a student will follow to solve a math word problem, you might ask the math teacher for guidance in constructing the steps. Or, if you are developing a checklist to train a student to wash her hands, you might consult the school nurse for expert advice on the sequence of steps to include.

The sample tasks analysis below shows how the behavior goal ("The student is ready to learn at the start of class") can be converted into more specific steps that can be taught, observed, and measured.

Behavior Checklist Example: The student is ready to learn at the start of class.

At the start of class, the student:
❑ has a sharpened pencil.
❑ has paper for taking notes.
❑ has cleared his/her desk of unneeded materials.
❑ has homework ready to turn in.
❑ has put his/her cellphone in backpack.
❑ is sitting quietly.
❑ is working on the start-of-class assignment.

Teaching Positive Behaviors Using Checklists. Positive behaviors must be taught. This direct-instruction sequence can help your students to both correctly master and actually engage in expected behaviors. This framework includes four major stages:

1. **Show Them.** Using your behavior checklist as a guide, you explain and explicitly model expected ("target") behaviors.

2. **Watch and Praise Them.** Students practice target behaviors under your supervision--and you give frequent corrective feedback and praise.

3. **Practice, Practice, Practice.** Students engage in behaviors independently with your encouragement and reinforcement.

4. **Prompt Behaviors Across Settings.** With your prompting and feedback, students are able to display target behaviors appropriately across a variety of settings or situations ("generalization").

Making Behavior Checklists. You can use a free web-based app, the Self-Check Behavior Checklist Maker, to create customized behavior checklists. This app is available at:

http://www.interventioncentral.org/tools/self-check-behavior-checklist-maker

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Task Analysis Example: Math Word Problem: 7-Step Self-Check

Checklist Item
1. **Reading the problem.** I read the problem carefully. When I do not understand part of the problem (such as a vocabulary word), I try to figure it out before going forward.
2. **Paraphrasing the problem.** I put the math problem into my own words--and keep at this step until I feel that I am describing the problem correctly.
3. **Drawing the problem.** I make a drawing that presents the problem as one or more pictures.
4. **Creating a plan to solve the problem.** Now that I understand what the problem is asking me to do, I make a plan to solve it.
5. **Predicting/Estimating the answer.** Using my estimating skills, I come up with my best guess for what the answer will be.
6. **Computing the answer.** I solve the problem, showing all of my work so that I can remember the steps that I followed.
7. **Checking the answer.** I check my work for each step of the problem to make sure that it is correct. I also compare my actual answer to make sure that it is close to my estimate.

How To: Increase Motivation in Students: High-Probability Requests

Non-compliance is a frequent source of problem classroom behavior--driven by student attempts to escape or avoid challenging academic tasks (Packenham, Shute & Reid, 2004). For instance, when transitioning between educational activities a work-avoidant student may stall in beginning the next assignment. Or, during independent assignments, that same student may run out the clock by dawdling between work items. To increase compliance and work completion, teachers should identify strategies that prevent off-task behaviors but must also continue to hold students accountable for attaining rigorous academic standards.

High-probability requests are one feasible classroom technique that can be effective in motivating students to engage in assigned classwork (Lee, 2006). The teacher first identifies an academic activity in which the student historically shows a low probability of completing because of non-compliance. The teacher then embeds within that low-probability activity an introductory series of simple, brief 'high-probability' requests or tasks that this same student has an established track record of completing (Belfiore, Basile, & Lee, 2008).

As the student completes several embedded high-probability tasks in succession, he or she builds 'behavioral momentum' in responding that increases the likelihood that the student will apply full effort when encountering the 'main event'--the more challenging, low-probability activity. (See the table *Use of High-Probability Requests to Increase Student Compliance: Examples from Research Studies* for descriptions of how high-probability requests have been used successfully in school settings.)

Use of high-probability requests offers the twin advantages of motivating students while encouraging high academic standards. Students can find the experience of completing simple, high-probability tasks to be intrinsically reinforcing--which fuels the behavioral momentum that gives this strategy its power (Lee et al., 2004). At the same time, this approach offers teachers a means of holding non-compliant students to the same high academic expectations as their more cooperative classmates (Belfiore et al., 2008).

A potential instructional advantage of the high-probability request strategy should also be noted. Research suggests that student retention of learned material is heightened if that material is reviewed at intervals of several months or more from the initial learning (Pashler et al., 2007). If teachers are able to fold previously learned academic material (e.g., math

Use of High-Probability Requests to Increase Student Compliance: Examples from Research Studies

Transitioning within academic tasks: Letter/word copying (Lee et al., 2004). During independent work, two 2nd-grade students were directed to copy a letter several times from a model (a preferred, high-probability task) before being asked to copy a whole word from a model (less-preferred, low-probability task).

Transitioning within academic tasks: Math computation (Lee et al., 2004). Three students with IEPs from intermediate grades were presented with flashcards containing math computation problems. The students were to read off and solve each problem, flip the card over to check the actual answer against their solution, and then advance to the next card. For the activity, the teacher first created a series of cards containing low-probability computation problems that were less-preferred because of their difficulty. Then, before each low-probability problem, the teacher inserted flashcards with three easy (more-preferred, high-probability) computation problems.

Transitioning between academic tasks: Independent math assignment (Wehby & Hollahan, 2000). This study focused on a middle-school student who often would not initiate independent math assignments. The teacher compiled a list of high-probability requests related to the independent math assignment that the student would typically respond to--e.g., 'write your name on the worksheet", "pick up your pencil", "take out a sheet of paper for the assignment", "look over the first problem". At the start of the independent seatwork activity, the teacher approached the student and randomly selected and delivered 3 requests from the high-probability list. If the student ignored a request, the teacher would simply deliver another from the list until the student had successfully complied with 3 high-probability requests. Then the teacher delivered the less-preferred, low-probability request: "Begin your independent assignment."

computation facts; course vocabulary items) into high-probability requests, they can both boost student work compliance and promote retention of essential skills or knowledge.

Here are more detailed teacher guidelines from Lee (2006) for embedding high-probability requests to build behavioral momentum sufficient to motivate students to tackle less-preferred, low-probability academic activities:

1. *Identify incidents of non-compliant behavior.* The teacher notes academic work-situations that initially have a low probability for completion because of student non-compliance (e.g., writing a journal entry; completing a worksheet with reflective questions tied to a reading assignment). The teacher also determines whether non-compliance in each situation occurs within that task or in transitioning to that task.

2. *List high-probability tasks.* Next, the teacher generates a list of high-probability tasks that the student is likely to comply with. These tasks should be brief (i.e., take 5 seconds or fewer to complete) and should logically link to the low-probability activity. For example, if the low-probability event is getting the student to start the writing of a journal entry (transitioning between academic activities), easy, high-probability tasks associated with beginning the writing task might include 'organize your writing materials', 'write a title', and 'list 3 ideas for the journal entry'. If the low-probability event is having the student complete a worksheet with reflective questions tied to an assigned reading (within-task), sample high-probability tasks associated with the worksheet could include questions asking the student to 'copy the title of this reading', or 'write down one interesting vocabulary term from the first paragraph'.

3. *Create activities with embedded high-probability tasks.* The teacher then reworks the low-probability work-situation to embed within it a series of high-probability tasks. If the target is to get the student to transition efficiently from one activity to another, the teacher inserts 3 high-probability requests at the start of the activity to create behavioral momentum. If the goal is to prod the student to efficiently complete an independent assignment without hesitating between items, the teacher inserts 3 high-probability requests before each challenging item on the assignment.

4. *Introduce the activities.* The teacher rolls out the activities, now retooled to include embedded high-probability tasks or requests. The teacher is careful, when presenting directives aloud to the student, to pace those directives briskly: letting no more than 10 seconds elapse between student completion of one request and teacher delivery of the next request. The teacher should also monitor the student's performance. If the student does not comply quickly with selected high-probability requests, the teacher should replace those requests on future assignments with others that elicit prompt compliance.

The guidelines offered here demonstrate how strategic use of high-probability requests can generate behavioral momentum and prevent compliance problems with individual students. However, teachers may also be able to creatively use high-probability sequences to motivate whole groups or even an entire class. For example, an instructor might decide to intersperse 3 'easy' (high-probability) items between each 'challenge' item on a math computation worksheet to be assigned to all students for independent seatwork. Or a teacher may routinely introduce in-class writing assignments by first verbally directing students to 'take out paper and pen', 'write your name on the paper', and 'copy this journal topic onto your paper'. The crucial factor in group use of high-probability sequences is that the teacher accurately identify what tasks are indeed motivating and likely to build behavioral momentum among the majority of students.

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How To: Improve Student Self-Management Through Work-Planning Skills: Plan, Work, Evaluate, Adjust

It is no surprise to teachers that, when students have poor work-planning skills, their academic performance often suffers. Work-planning is the student's ability to inventory a collection of related sub-tasks to be done, set specific outcome goals that signify success on each sub-task, allocate time sufficient to carry out each sub-task, evaluate actual work performance, and make necessary adjustments in future work-planning as needed (Martin, Mithaug, Cox, Peterson, Van Dycke & Cash, 2003).. When students are deficient as work planners, the negative impact can be seen on in-class and homework assignments as well as on longer-term projects such as research papers. Teachers can develop students' work-planning skills by training them in a simple but effective sequence: to plan upcoming work, complete the work, evaluate their work performance, and adjust their future work plans based on experience (Martin et al., 2003).

The vehicle for teachers to train students to develop strong work-planning skills is through conferencing: the teacher and student meet for a pre-work *planning* conference and then meet again after the work is completed at a *self-evaluation* conference. NOTE: The *Student Independent Work: Planning Tool* that appears later in this document is a graphic organizer that can be used to structure and record these 2-part teacher-student conferences.

Phase 1: Work-Planning Conference

Before the student begins the assigned academic work, the teacher meets with the student to develop the work plan. (While the teacher often initially assumes a guiding role in the work-planning conference, the instructor gradually transfers responsibility for developing the plan to the student as that student's capacity for planning grows.)

There are 3 sections in the work-planning conference: (1) inventory the sub-tasks to be done, (2) assign an estimated time for completion, and (3) set a performance goal for each item on the task list:

1. *Inventory the sub-tasks to be done.* The student describes each academic task in clear and specific terms (e.g., "Complete first 10 problems on page 48 of math book", "write an outline from notes for history essay"). For this part of the work plan, the teacher may need to model for the student how to divide larger global assignments into component tasks.

2. *Assign an estimated time for completion.* The student decides how much time should be reserved to complete each task (e.g., For a math workbook assignment: "20 minutes" or "11:20 to 11:40"). Because students with limited planning skills can make unrealistic time projections for task completion, the teacher may need to provide additional guidance and modeling in time estimation during the first few planning sessions.

3. *Set a performance goal.* The student sets a performance goal to be achieved for each sub-task. Performance goals are dependent on the student and may reference the amount, accuracy, and/or qualitative ratings of the work: (e.g., for a reading assignment: "To read at least 5 pages from assigned text, and to take notes of the content"; for a math assignment: "At least 80% of problems correct"; for a writing assignment: "Rating of 4 or higher on class writing rubric"). The teacher can assist the student to set specific, achievable goals based on that student's current abilities and classroom curriculum expectations.

Phase 2: Self-Evaluation Conference

When the work has been completed, the teacher and student meet again to evaluate the student's performance. There are 2 sections to this conference: (1) Compare the student's actual performance to the original student goal; and (2) adjust future expectations and performance in light of the experience gained from the recently completed work.

1. *Compare the student's actual performance to the original student goal.* For each sub-task on the plan, the student compares his or her actual work performance to the original performance goal and notes whether the goal was achieved. In addition to noting whether the performance goal was attained, the student evaluates whether the sub-task was completed within the time allocated.

2. *Adjust future expectations and performance.* For each sub-task that the student failed to reach the performance goal within the time allocated, the student reflects on the experience and decides what adjustments to make on future assignments. For example, a student reviewing a homework work-plan who discovers that she reserved insufficient time to complete math word problems may state that, in future, she should allocate at least 30 minutes for similar sub-tasks. Or a student who exceeds his performance goal of no more than 4 misspellings in a writing assignment may decide in future to keep a dictionary handy to check the spelling of questionable words before turning in writing assignments.

References

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Student Independent Work: Planning Tool

Student: _____ Teacher/Staff Member: _____ Date: ___/___/___

	Date:	Planning Sub-Task: Describe each assignment sub-task to be completed.	Planning Time Allocated: Estimate the time required for this task. E.g., "20 mins"; "11:20-11:40"	Planning Performance Goal: Write your goal for the amount, accuracy, and/or quality of work to be completed.	Self-Evaluation Actual Performance: After the assignment, record the amount, accuracy, and/or quality of the work *actually completed*.	Self-Evaluation Goal Met?: Did you achieve the goal within the time allocated?
1	___/___/___					☐ YES ☐ NO
2	___/___/___					☐ YES ☐ NO
3	___/___/___					☐ YES ☐ NO
4	___/___/___					☐ YES ☐ NO

Adjustment: Find any 'NO' responses in the **Goal Met?** column. In the space below, write the number of that goal and your plan to improve on that goal next time.

Number of Goal Not Met & Action Plan to Fix: _____ _____

Number of Goal Not Met & Action Plan to Fix: _____ _____

Number of Goal Not Met & Action Plan to Fix: _____ _____

How to: Increase Motivation: Learning Contracts

Description. A learning contract is a voluntary, student-completed document that outlines actions the learner promises to take in a course to achieve academic success. This contract is signed by the student, the instructor, and (optionally) the parent. Benefits of all such contracts, however, are that they provide academic structure and support, motivate struggling learners by having them pledge publicly to engage in specific, positive study and learning behaviors, and serve as a vehicle to bring teachers and students to agreement on what course goals are important and how to achieve them (Frank & Scharff, 2013). NOTE: See the learning contract appearing later in this document as an example of how these contracts can be formatted.

Procedure: The learning contract is typically completed in a meeting between the student and instructor. (In middle and high schools, the parent may also be a participant.) While there are many possible variations on the learning contract, they often contain these components (Frank & Scharff, 2013; Greenwood & McCabe, 2008):

- *Statement of Purpose*. The contract opens with a statement presenting a rationale for why the contract is being implemented. A sample statement might be: *I am taking part in this learning contract because I want to improve my grades and pass this course*.

- *Student Actions*. The contract lists any actions that the student is pledging to complete to ensure success in the course. Suitable targets for learning contract items might include attendance, class participation, completion of classwork or homework, seeking of instructor help, etc. See Figure 1 for a listing of sample actions that might be written into a learning contract.

> ### Figure 1: Sample Student Learning Contract Items
>
> - **Attendance**. *I will attend at least 80 percent of class sessions.*
> - **Course Participation**. *I will contribute at least one comment to every in-class discussion.*
> - **Readings**. *I will complete all assigned readings.*
> - **Study/Assignments**. *I will spend a minimum of 1 hour per day reviewing notes and working on assignments.*
> - **Course Help**. *I will attend instructor office hours at least once per week.*
> - **Group Project**. *I will communicate at least weekly with peers in my work group (face-to-face or electronically) about our shared course project.*

- *Teacher Actions.* The learning contract can be strengthened by adding a section detailing those actions that the instructor agrees to undertake to support the student. For example, the contract might state that the instructor will respond within 24 hours to course questions emailed by the student or will check weekly and alert the student to any missing course work. Listing teacher responsibilities on the contract emphasizes that success in the course is a shared endeavor and can prod the student to take advantage of instructor supports that might otherwise be overlooked.

- *Sign-Off.* Both student and teacher sign the learning contract. If the parent is participating in the development of the contract, he or she also signs the contract. Because this document is a kind of 'promissory contract' (Rousseau & Parks, 1993), the student signature in particular indicates a voluntary acceptance of the learning contract and a public pledge to follow through on its terms.

Tips for Use. Here are additional ideas for using learning contracts:

- *Contracts and Whole-Group instruction.* If a number of students in a class would benefit from learning contracts as a motivational tool, teachers can incorporate them into whole-group instruction. For example, an instructor may write a series of learning-contract goals on the board (similar to the list appearing in Figure 1) and direct each student to select 3 or 4 to include in his or her own contract. The teacher would collect copies of all learning contracts and hold every student accountable for their use.

- *Contracts & Enrichment.* Learning contracts can also be a convenient way to document individualized plans for enriched instructional activities. Advanced students can fill out contracts detailing their ambitious, self-directed learning goals; these contracts can also describe extra credit or other forms of recognition that students will earn for these enrichment activities.

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Name: Troy Blue   **Teacher:** Mr. Smith   **Class/Course:** Algebra I   **Date:** 16 November 2015

Troy Blue's Learning Contract

I am taking part in this learning contract because the strategies listed here will help me to learn the material and perform well in this course.

Student Responsibilities--

I have chosen to complete the following actions:

1 | I will be on-time for class.

2 | I will turn in at least 80% of assigned homework, with all work completed.

3 | I will spend a minimum of 1 hour per day reviewing notes and working on assignments.

4 | I will check in with the instructor during his free period at least once per week and bring any questions from current work.

Teacher Responsibilities---

My teacher will help me to achieve success in this course through these actions/supports:

1. Answer questions and offer help during weekly free-period check-ins.
2. Remind Troy weekly about any missing assignments.
3. Supply review copy of class notes each period.

Length of Contract--

The terms of this contract will continue until:

My Algebra course grade rises to 75 or higher.

Sign-Offs--

Mr. Frank Smith   *Troy Blue*   *Diane Blue*

_____   _____   _____

Mr. Smith   Troy Blue   Diane Blue

Teacher   Student   Parent

Managing Academic Anxiety Through an Antecedent Writing Activity

Description. Students may become anxious when faced with academic tasks such as test-taking—to the point at which the anxiety seriously interferes with their work performance. Being barraged with anxious thoughts while trying to complete academic tasks is a negative form of multi-tasking and taxes working memory (Beilock & Willingham, 2014). Anxious thoughts divert attention and thus degrade student performance.

One strategy that can help students to minimize the intrusion of anxious thoughts during a stressful test or assignment is to have them first complete a brief (7- to 10-minute) writing exercise in which they write about their anxiety (Park, Ramirez, & Beilock, 2014). This activity can lower anxiety levels and thus allow the student to complete the academic task without interference.

We term this strategy an 'antecedent writing exercise' because the writing assignment precedes—and therefore reduces or eliminates—the academic anxiety.

Procedure. Just before an individual student or larger group begins a high-stakes academic task that is likely to trigger anxiety, the teacher hands out a worksheet with these (or similar) instructions (adapted from Beilock & Willingham, 2014):

==

I would like you to write honestly about what you are thinking and feeling as you prepare to take this exam/start this assignment.

Because everyone is unique, there is no 'correct response' to this writing task. You should just describe as fully as you can your thoughts and feelings about the exam/assignment. You can also write about how your current thoughts and feelings might be the same as—or different from—those you experienced in similar past situations.

You will have __ minutes to write. Please keep writing until you are told to stop. I will not collect this assignment.

==

The instructor gives students 7-10 minutes to complete the writing assignment. Students are then instructed to put their compositions away (they are not collected). The class then begins the high-stakes academic task.

Tips for Use. Here are suggestions for using this antecedent writing exercise:

- *Administer to the entire class.* Certain academic tasks, such as important tests, will trigger anxiety in many, if not most, students in a classroom. Teachers can use this writing exercise with the entire group as an efficient way to 'take the edge off' this anxiety for all students and potentially improve their test performance.

- *Teach students to use independently.* Some students experience significant levels of anxiety even during independent work – such as math homework. This writing exercise can be a good warm-up activity that students can use to allay anxiety and increase their academic focus.

References

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Schoolwork Motivation Assessment
(adapted from Witt & Beck, 1999; Witt, VanDerHeyden & Gilbertson, 2004)

Student: _____ Teacher/Classroom: _____

Date of Assessment: ___/___/___ Person Completing Assessment: _____

| Step 1: Assemble an incentive menu. Create a 4-5 item menu of modest incentives or rewards that students in the class are most likely to find motivating. Examples of popular incentives include:
• small prizes such as pencils or stickers,
• 5 minutes of extra free time,
• an opportunity to play a computer game,
• praise note or positive phone call to parent | Incentive / Reward Menu

Idea 1: _____

Idea 2: _____

Idea 3: _____

Idea 4: _____

Idea 5: _____ |

Step 2: Create two versions of a CBM probe or timed worksheet. Make up two versions of a structured, timed worksheet with items of the type that the student appears to find challenging. Use one of the options below:

Option 1:Create Curriculum-Based Measurement probes. The probes should be at the same level of difficulty, but each probe should have different items or content to avoid a practice effect. NOTE: CBM probes in oral reading fluency, math computation, writing, and spelling can all be used.

Option 2: Make up two versions of custom student worksheets. The worksheets should be at the same level of difficulty, but each worksheet should have different items or content to avoid a practice effect. NOTE: If possible, the worksheets should contain standardized short-answer items (e.g., matching vocabulary words to their definitions) to allow you to calculate the student's rate of work completion.

Step 3: Administer the first CBM probe or timed worksheet to the student WITHOUT incentives. In a quiet, non-distracting location, administer the first worksheet or CBM probe under timed, standardized conditions. Collect the probe or worksheet and score.

| Step 4: Compute an improvement goal. After you have scored the first CBM probe or worksheet, compute a '20 percent improvement goal'. Multiply the student's score on the worksheet by 1.2. This product represents the student's minimum goal for improvement. | Student Score on First
CBM Probe or Worksheet _____
Multiplied by: *1.2*

Yields an improvement
goal of: _____ |

Step 5: Have the student select an incentive for improved performance. Tell the student that if he or she can attain a score on the second worksheet that meets or exceeds your goal for improvement (Step 3), the student can earn an incentive. Show the student the reward menu. Ask the student to select the incentive that he or she will earn if the student makes or exceeds the goal.

Step 6: Administer the second timed worksheet to the student WITH incentives. Give the student the second CBM probe. Collect and score. If the student meets or exceeds the pre-set improvement goal, award the student the incentive.	Student Score on Second CBM Probe or Worksheet _____ Compared to: Improvement goal of: _____

Step 7: Interpret the results of the academic motivation assessment to select appropriate interventions. Use the decision-rules below to determine recommended type(s) of intervention:

❑   ACADEMIC INTERVENTIONS ONLY. If the student fails to meet or exceed the improvement goal, an academic intervention should be selected to teach the appropriate skills or to provide the student with drill and practice opportunities to build fluency in the targeted academic area(s).

❑   COMBINED ACADEMIC AND PERFORMANCE INTERVENTIONS. If the student meets or exceeds the improvement goal but continues to function significantly below the level of classmates, an intervention should be tailored that includes strategies to both improve academic performance and to increase the student's work motivation. The academic portion of the intervention should teach the appropriate skills or to provide the student with drill and practice opportunities to build fluency in the targeted academic area(s). Ideas for performance interventions include (a) providing the student with incentives or 'pay-offs' for participation and/or (b) structuring academic lessons around topics or functional outcomes valued by the student.

❑   PERFORMANCE INTERVENTIONS ONLY. If the student meets or exceeds the improvement goal with an incentive and shows academic skills that fall within the range of 'typical' classmates, the intervention should target only student work performance or motivation. Ideas for performance interventions include (a) providing the student with incentives or 'pay-offs' for participation and/or (b) structuring academic lessons around topics or functional outcomes valued by the student.

References:

Witt, J., & Beck, R. (1999). *One minure academic functional assessment andinterventions: "Can't" do it…or "won't" do it?* Longmont, CO: Sopris West.
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Communication Tools to Motivate and Engage the Reluctant Student

When talking with a student who appears reluctant, avoidant, or even oppositional, you can use communication techniques to reduce that learner's defensiveness and steer the conversation toward positive, change-oriented outcomes. While these tools are diverse, they all allow you to avoid pointless argument or confrontation while promoting in the student an increased sense of empowerment and hope.

1	Acknowledging Student Control.

It is a simple fact that the student alone has the power to commit to--or refuse to participate in--a change plan. So teacher statements that frankly *emphasize student control* can have positive effects. First, such statements underscore personal responsibility and can thus discourage the learner from projecting blame onto others for their own actions; second, they can reduce the likelihood of a student-teacher power struggle by preemptively recognizing the student's control of the situation. Here are sample statements that highlight student control:

"We can talk about a plan to help you to improve your grades in this course. What that plan includes is up to you."

"I've offered you several ideas for getting your homework in. Which of my ideas or strategies of your own do you want to include in a learning contract?"

"One tool that students often find useful is a learning contract. Let me know if this is something you want to create."

2	Active Listening.

You can use *active-listening* strategies to signal that you have truly heard and understood the student's concerns. The two elements that make up active listening are *restatement* and *summary*.

- During the flow of conversation, you use *restatements* of what was said by the student strategically to highlight specific comments that you judge significant. For example, a student may state, "I don't like asking for help in class". The teacher judges this to be an important point and restates it: "So you really would like to not have to ask others for help." When used judiciously, restatement conveys that you are paying close attention. Restatements also selectively bring to the student's attention statements that the teacher finds noteworthy.

- *Summaries* are brief statements in which you 'sum up' a related series of student utterances. For example, a teacher may summarize a student's comments about difficulties in getting homework turned in: "So, you find that the homework is difficult to do and takes a lot of time. Plus you said that it can be hard to find a quiet place at home to do your homework."

3	Reflection.

Reflection statements give you a means of inserting your interpretation or reaction when restating student statements. Often, reflection serves to express understanding, or empathy, for the student's situation. If a learner states, for example, "I don't like asking for help in class", the teacher might convey empathy by reflecting: "I imagine that it would be uncomfortable to bring attention to yourself by asking for help."

4	Reframing.

When you want the student to consider a different way of looking at a fact, event, or situation, you can employ a *reframing* statement. If a student says, for example, "I'm really frustrated because I put so much work into studying for the test and still got a low grade.", the teacher might put a different 'spin' on that statement by reframing it: "Give yourself a little credit here-- at least you are willing to put in the effort to study-and that's a good start."

5	Positive Redirection.

In any problem-solving conversation, the student can sometimes need a nudge to move from describing the problem to generating solutions. In *positive redirection*, you can use a student statement as a starting point and then redirect-- or 'pivot'-- the student toward a solution-focused action. Here is an example of a teacher's use of positive redirection: "You just described obstacles that prevent you from completing your homework. What are some strategies that could help you to overcome these problems?"

6	Exploratory Questions.

At times, you will want to probe a student's statement further or press him or her (gently) for details. *Exploratory questions* work well for this purpose. When posting such a question, you restate what was said by the student and ask for clarification. Here is an sample: "You say I always pick on you. Can you give examples when it seems like I've picked on you?" NOTE: Exploratory questions can be particularly helpful when a student makes a statement that seems exaggerated. When a learner says "You always pick on me", for example, a follow-up question seeking specific examples can prod the student to acknowledge that these incidents may not in fact be as pervasive as first indicated.

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7	Apology.

During a student conference, we may find that the learner is unhappy because he or she felt belittled or otherwise mistreated at our hands. And occasionally, that student is--right. As educators, we are human: we can unintentionally offend students through an overbearing tone of voice, singling out individuals in ways that embarrass them in front of peers, or other violations of social protocol. In these (hopefully rare) instances, we must be ready to acknowledge our fault and apologize to the student. Apologies should be delivered only when justified and genuine. Appropriately used, however, they can be of great power in reestablishing positive connections with challenging learners. Here is an example of a teacher apology: "I didn't realize until we talked that my jokes in class about your cluttered desk bothered you. I'm sorry--I didn't mean to embarrass you. Between us, let's come up with a better way to handle this issue."

How to: Run Conferences That Encourage Student Responsibility and Follow-Through

If you have a student who struggles with classroom academics or behavior, you may want to invite the student (and perhaps the parents) to a 'problem-solving' conference. The purpose of this meeting is to understand the cause(s) of the student's difficulties and to put together an action plan to address them.

To prepare for the meeting, envision your role as that of an 'academic coach'. Avoid a lecturing or authoritarian style, as this is likely to cause the student to become defensive or shut down. Instead, address the student in a positive tone to create an atmosphere in which the student feels safe to open up and communicate true feelings and emotions (Miller & Rollnick, 2004).

Note, however, that a positive, solution-focused style of interaction still permits you to clearly communicate to the student any concerns about poor attendance, limited work completion, or other negative factors preventing academic success. These concerns should be stated honestly and matter-of-factly, but without gratuitous critical comments that can trigger a defensive student reaction.

The remainder of this article presents a simple 5-step process for running a teacher-student problem-solving conference that makes it more likely that the student will exit the meeting feeling optimistic and motivated to start a change plan. This meeting process includes explicit steps taken from motivational research, including having the student visualize benefits of their change-goal goal, and prompting the student to identify blockers to the change-goal and then generate solutions to overcome those obstacles.

STEP 1: Introduce the problem-solving process. You can open the meeting with a brief set of talking points that state the purpose of the discussion, lay out the agenda, and emphasize the student's role as full participant who retains control over the creation and content of a change-plan. (See sample *Student-Centered Problem-Solving Meeting: Introductory Talking Points* later in this document.) These talking points are key to effective meetings, as they establish the outcome goal as the creation of a change-plan and encourage the student to take an active and participatory role.

STEP 2: Identify a target for change. In this step, you and the student agree on a current problem that is to be the target of discussion and a change plan. (Generally, a single problem is recommended, to keep the scope of the final change plan manageable.) Examples of suitable problems are limited homework completion; low test, quiz, or course grades; and poor class attendance.

While the conference is student-centered, as the teacher, you can take the lead at this stage of the meeting in naming the problem that most concerns you (e.g., "Rick, we are here because we need to find a way to improve your class attendance."). After all, attendance, grades, and homework completion are not negotiable problems, since poor performance on any one of these can lead to course failure and other negative outcomes.

Also, when data are available, you and/or the student should quantify and record the magnitude of the target problem. Here are examples: "I have not turned in 30% of my homework assignments; I have missed 10 of 24 possible class sessions"; "I have a class grade average of 50").

If the student has several candidates for target problems, you can decide together which problem should be selected for immediate action, with the understanding that you can meet again at a future time to create further action plans for the additional student challenges.

You are ready to move to the next meeting stage when you and the student have chosen, written down, and (when possible) adequately quantified the target problem.

STEP 3: Establish the change-goal. Having established what the target problem is, you and the student will next set the goal that the student wishes to accomplish--the 'change-goal'.

In most instances, the general change goal is obvious, as it is the solution to the target problem chosen in the previous step. For a student with poor class attendance, for example, the logical change goal is consistently to show up to class on time.

It is recommended that the change goal be stated in clear and specific terms that will allow an observer to verify it as accomplished ('yes') or not accomplished ('no'). A class-attendance change goal for Rick, for example, may be worded as: "I will miss no more than one class session in the next 5 weeks of school." Stated in this way, there will be no doubt at the end of 5 weeks whether the student's attendance goal has been successfully met.

You are ready to move to the next meeting stage when the student has selected an appropriate change goal and that goal is worded to allow for a 'yes/no' judgment about completion.

STEP 4: Visualize the change-goal. Research shows that we increase our motivation to reach a goal when we actively visualize--even briefly-- the benefits that this future accomplishment will bring us (Oettingen & Gollwitzer, 2010). Once a change goal has been set, you direct the student to devote a moment to (1) imagine that the student has attained the change goal; and (2) list in writing ways in which his or her situation would improve as a result.

The student Rick, for example, may envision benefits of improving his attendance as, "I will get better grades; kids won't tease me about skipping; I won't have to keep meeting with my teacher and the counselor; my mom won't get so many phone calls; I can pass the course and graduate on time."

You are ready to move to the next meeting stage when the student has made a genuine effort to visualize, describe, and record tangible benefits of reaching the change goal.

STEP 5: IDENTIFY OBSTACLES TO THE CHANGE GOAL AND DEVELOP AN ACTION PLAN. The gap that the student must close to reach his or her change goal can be considerable, and numerous obstacles can interfere with success. Ideally, the student will retain a sense of optimism when working toward a change goal. The odds for success increase considerably, however, when the student has also anticipated and brainstormed solutions for difficulties that will inevitably arise along the way (Oettingen & Gollwitzer, 2010).

With the student primed by the just-completed exercise of envisioning a successful change goal, you now direct that student to think about the contrast between the desired goal and his or her current situation. Next, the student is asked to list any obstacles that might prevent him or her from moving from the current situation to the change goal. Once this list of obstacles has been generated, the student comes up with and records one or more ideas to overcome each obstacle. When completed, the list of obstacles and corresponding solutions serves as the student's action plan for attaining the change goal.

The student Rick, for example, may identify two primary obstacles that could interfere with the change goal of getting to class on time: (1) He notes that he often oversleeps; and (2) he admits that sometimes he intentionally skips class because his homework is not done.

- To address the obstacle of oversleeping, Rick identifies the strategies of getting to bed earlier and setting an alarm.

- To ensure that he completes homework for the course, Rick settles on the solutions of scheduling a fixed time each night for doing homework and giving priority to completing any homework for the course in which he has poor attendance.

This list of obstacles and their solutions is Rick's action plan to achieve the change goal of "missing no more than one class session in the next 5 weeks of school."

You and the student have finished this Student-Centered Problem-Solving Meeting when the student has identified a target problem to fix, articulated a change goal, and created an action plan (consisting of potential obstacles and matching solutions) to reach the change goal.

Student-Centered Problem-Solving Meeting: Introductory Talking Points

Welcome. We are meeting today to talk about how to [insert the reason for the problem-solving conference: e.g., "get your missing assignments turned in"; "improve your course grade"]. *Our purpose is to come up with a plan that will help you to be successful.* *If you agree to develop an action plan today and then are able to follow through with it, I am confident that you will achieve your goals and be successful in this class.*	**Statement of Purpose.** The opening segment states the meeting focus. The concluding statement in this section is patterned as a 'growth mindset' statement (Dweck, 2006).
In our meeting, we will: - *identify one or more challenges to work on, and* - *set goal(s) to overcome those challenges.* *If you agree, we will then:* - *design an action plan for you to reach your goals.*	**Agenda.** The teacher briefly sketches out the 3 meeting stages: (1) problem identification; (2) goals for improvement; and (3) [optionally] creation of an individualized 'change plan'.
I can help with this action plan. *But it's up to you to decide whether to create the plan and--if so--what*	**Rules of Engagement.** The student is encouraged to be a full participant in the

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will go into it.	problem-solving meeting.
Throughout the meeting, please be as honest as you can in telling me what is interfering with your success in the classroom, how I or others in our school can help you, and what other supports you might need.	Note that the script emphasizes the student's discretion in deciding whether to participate in a change plan.
Let's begin!	

Student-Centered Problem-Solving Meeting:
Recording Form

Meeting Information					
Student:		Meeting Participants:		Meeting Date:	

Identify Your Target for Change. Select the target problem that you want to be the focus of this change plan. (When possible, use data to describe the problem more clearly.

Target: Write a description of your target problem:

Establish Your Change Goal. Come up with your change goal to resolve the target problem. State the change goal in clear, specific terms to allow an observer to verify whether it has been accomplished ('yes') or not accomplished ('no'):

Goal: Write in the goal that you plan to work toward:

Visualize Your Change Goal. Imagine that you have accomplished your change goal. Write down what improvements or benefits would result:

Visualize: Write down benefits you can imagine experiencing if you meet your goal:

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Develop Your Action Plan.. Imagine likely obstacles that might interfere with your success in reaching your goal
Then plan for how to overcome each obstacle:

Action Plan: In the left column, write down obstacles that you think might prevent you from achieving your change-goal. In the right column, write down solutions for overcoming each obstacle:	
Obstacles	Solutions

Student-Centered Problem-Solving Meeting:
Recording Form

Meeting Information					
Student:	Rick	Other Meeting Participants:	Mr. Barber, Social Studies	Meeting Date:	Feb 8, 2018

Identify Your Target for Change. Select the target problem that you want to be the focus of this change plan. (When possible, use data to describe the problem more clearly.

Target: Write a description of your target problem:
Attendance: I have missed 10 of 24 class sessions.

Establish Your Change Goal. Come up with your change goal to resolve the target problem. State the change goal in clear, specific terms to allow an observer to verify whether it has been accomplished ('yes') or not accomplished ('no'):

Goal: Write in the goal that you plan to work toward:
I will miss no more than 1 class session in the next five weeks of school.

Visualize Your Change Goal. Imagine that you have accomplished your change goal. Write down what improvements or benefits would result:

Visualize: Write down benefits you can imagine experiencing if you meet your goal:
I will get better grades. Kids won't tease me about skipping. I won't have to keep meeting with my teacher and the counselor. My mom won't get so many phone calls. I can pass the course and graduate on time

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Develop Your Action Plan.. Imagine likely obstacles that might interfere with your success in reaching your goal Then plan for how to overcome each obstacle:

Action Plan: In the left column, write down obstacles that you think might prevent you from achieving your change-goal. In the right column, write down solutions for overcoming each obstacle:	
Obstacles	Solutions
I sometimes oversleep.	I will go to bed earlier. I will set my alarm.
I skip class when I haven't done my homework.	I will schedule a regular time each night for doing homework. I will first do nightly homework for this course to be sure it gets done.

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