


High-Probability Request Sequence: An Effective, Efficient Low-Intensity Strategy to Support Student Success

Beyond Behavior
1–6
© Hammill Institute on Disabilities 2018
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/1074295618798615
journals.sagepub.com/home/bbx


Leslie Ann Bross, MEd¹, Eric Alan Common, PhD, BCaBA²,
Wendy Peia Oakes, PhD³, Kathleen Lynne Lane, PhD, BCBA-D¹,
Holly M. Menzies, PhD⁴ , and Robin Parks Ennis, PhD⁵

Abstract

High-probability request sequence (HPRS) is a low-intensity strategy designed to increase student compliance by creating behavioral momentum. Momentum is established by providing three to five requests that a noncompliant student is most likely to do followed quickly by a less preferred request. Herein, we describe a step-by-step process for using HPRS in schools. Throughout, we offer lessons from practitioners who have used HPRS with students, including those at risk for emotional and behavioral disorders.

Keywords

practices, efficacy/effectiveness, education/training, teacher(s), management, school/classroom, behavioral, interventions

Following teacher directions is a critical skill for student success across PK-12 classroom settings (Lane, Menzies, Ennis, & Oakes, 2018). When students follow directions, it contributes to safe, positive, and productive learning environments. One way to increase student engagement while simultaneously decreasing noncompliance is to utilize positive strategies that focus on making adjustments to the environment to set the stage for student success rather than waiting for challenges to occur and then responding (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008). Fortunately, teachers and other professionals can use effective and proactive low-intensity strategies implemented throughout the school day to promote student success.

High-probability request sequence (HPRS) is one such low-intensity strategy that can be used to support student engagement in academic, behavioral, and social domains. This strategy contributes to a respectful, positive learning environment because it builds momentum to help students begin a task, activity, or action they may not otherwise do (Mace et al., 1988). Consider a typical scenario. A teacher directs a student to sit at his designated spot for circle time, but the student runs away and begins playing with the cars in the block area. This sets the stage for a power struggle if the student does not respond to the teacher's directive to come back to circle time. Contrast this scenario with one wherein the teacher uses HPRS. That is, the teacher begins an activity with a request the student is more likely to follow, minimizing the possibility of noncompliance. In this instance, the teacher could start with a sing-along as children clap and

skip to their spot for circle time. The HPRS strategy specifically addresses one of the teacher's primary concerns—student noncompliance (Esch & Fryling, 2013). HPRS is one type of antecedent-based intervention, which is a strategy that is used *before* the problem behavior occurs (Cooper, Heron, & Heward, 2007; see Table 1).

Although HPRS has frequently been used to support students with emotional and behavioral disorders (EBD) or students who display noncompliance, this strategy can also be used to support instructional and/or classroom routines. Therefore, HPRS is applicable to both general and special education teachers, as well as other professionals (e.g., paraprofessionals, administrators, counselors, and school psychologists). This strategy is designed to elicit desired responses and prevent undesirable behavior from occurring. Professionals who implement antecedent-based interventions enable student success by designing activities in a way that minimizes or avoids problem behavior. Antecedent-based interventions decrease the use of corrective actions or

¹The University of Kansas, Lawrence, USA

²University of Michigan-Flint, USA

³Arizona State University, Tempe, USA

⁴California State University, Los Angeles, USA

⁵The University of Alabama at Birmingham, USA

Corresponding Author:

Leslie Ann Bross, Department of Special Education, The University of Kansas, 1122 West Campus Road, Lawrence, KS 66045, USA.
Email: leslie.bross@ku.edu

Table 1. High-Probability Request Sequences: High-Probability and Low-Probability Request Examples.

School setting	High-probability requests	Low-probability requests
Preschool circle time	“Touch your nose, touch your toes, give a little clap.”	“Fold your hands and put them in your lap.”
Math, independent practice	“I am going to watch you solve the first three problems. I know you are great at solving math facts!” “You solved those so fast, great effort!”	“Now try that next one. You can use your knowledge of the math facts to do it!” “You gave your best effort and solved that one too! Keep going . . .”
Social skills friendship group	“Shake hands or give high five, Say hello, Tell one idea of your own about a topic you like.”	“Ask your peer a question about a topic you know is interesting to him or her.”

punitive consequences that may shut down learning instead of facilitating it. When students have the opportunity to learn in environments where they feel emotionally and socially secure, they are more capable of meeting academic demands (Faircloth & Hamm, 2011). Tennessee middle school special education teacher Kathryn Germer believes the HPRS strategy helps her establish a secure learning environment:

Lessons Learned

I always start off the year using high-*p* (high-probability) requests to build rapport and establish instructional control. It was great to get to know students by asking them things that they thought were fun to do while they got to know me and our classroom. It helped me increase compliance as I introduced more formal instruction and made more challenging requests. During the school year, I use high-*p* to re-establish instructional control with students who were noncompliant and tantruming under the table. I introduced three to four high-*p* requests, things that I learned from our informational conversations early on that they were likely to do, and after establishing instructional control, I provided a direction to guide them to return to the task at hand. The high-*p* strategy helps shift their behavior from noncompliant to compliant. I find it to be a respectful approach to get students back on track. (Kathryn Germer)

HPRS: A Definition

Empirical evidence shows that HPRS is effective at minimizing noncompliance in the classroom (Losinski, Sanders, Katsiyannis, & Wiseman, 2017), which can result in increased time engaged in learning. Behavior momentum is similar to the common definition of *momentum*, the strength or force gained by the motion created by an event or series of events; that is, bodies in motion stay in motion. Imagine a car gaining momentum as it rolls down the hill or the motions of children who are participating in a game of Simon Says. Similarly, HPRS entails a teacher (or other professional) first giving a series of requests in short succession that the student is highly likely to comply with, the high-probability (high-*p*) requests, followed by a request a student is less likely to comply with, the low-probability (low-*p*) request. Because momentum has been created by the high-*p* compliance, the student is more likely to engage in the less preferred task or activity.

High-*p* requests are defined as those in which a student complies with or responds to when asked 80% or more of the time (e.g., touch your head, complete a known problem). Low-*p* requests are requests in which the student has demonstrated a history of either noncompliance or, when given the opportunity to complete the task, complies less than 50% of the time (e.g., transition to a new activity, complete a newly introduced and more difficult problem). The inclination to comply with the easier tasks builds the momentum for a student to move forward with a task for which he or she has less inclination to complete.

This strategy is well suited for use with students who have more severe behavior problems because it can reduce the number of confrontations experienced during the school day. The HPRS strategy is also a practical way to ease an entire class into an activity. For example, when a kindergarten teacher provides a cue to end center time and then begins a song to cue students to clean up centers and transition to the next task, she may say, “Freeze. Eyes on me,” then begin with the song, “Clean up, clean up . . .” She has cued the students to a momentum sequence. If she simply says, “Time to clean up and go to your reading tables,” some students may resist. Offering a few tasks that can be completed without difficulty increases the likelihood that all students will make the effort to complete them. In this example, the high-*p* requests are part of the daily classroom routine. The high-*p* requests also prime the students to focus their attention on the teacher and create some momentum toward the next task.

HPRS: Supporting Evidence

HPRS has a relatively large body of research demonstrating its effectiveness for promoting student compliance in the classroom, thereby increasing the time students are academically engaged. For example, Banda and Kubina (2006) looked at how HPRS supported a 13-year-old middle school student with autism to improve his transitions throughout the school day. The HPRS strategy reduced the average number of minutes per day it took the student to complete transitional behaviors and also reduced the number of prompts given by the teacher. In another study, HPRS was effective in increasing two fifth grade students with EBD in following instructions, with both general and special

education teachers suggesting that the strategy was easy to use and helpful for students (Axelrod & Zank, 2012).

Common and colleagues (2018) recently examined studies using HPRS across K-12 school settings. They first examined studies for methodological rigor by applying the Council for Exceptional Children's (2014) *Standards for Evidence-based Practices in Special Education*. In total, 22 studies were included in their review, of which 16 studies met or exceeded criteria for well conducted and reported studies. Then the authors examined study outcomes to determine the level of evidence supporting the use of this strategy. HPRS was found to be a potentially evidence-based practice. While this review did not focus nor identify HPRS as an evidence-based practice for a particular population, many of the students had a history of engaging in challenging behavior (e.g., emotional disturbance, history of disruption) and demonstrated positive outcomes associated with HPRS implementation. In addition, HPRS has utility for supporting students with academic activities, classroom routines, and social skills development.

Purpose

In the remainder of this article, we describe a step-by-step process for using HPRS in schools. For each step, we offer tips to support implementation success based on suggestions from researchers (e.g., Lee, Belfiore, & Budin, 2008) and advice from professionals.

HPRS: A Step-by-Step Process

We present a step-by-step process for implementing HPRS in PK-12 classrooms (Lane, Menzies, Ennis, & Oakes, 2015). Although we focus on examples in classroom settings, this strategy may be used to support children and youth in other settings as well (e.g., clinical, home, community). For additional information related to assessing treatment integrity, social validity, and student responding when utilizing HPRS, see Lane et al. (2015). Free-access professional learning materials for using HPRS are also available at ci3t.org/pl.

Step #1: Identify and Operationally Define the Targeted Low-Probability (Low-p) Behavior

We recommend that teachers begin by identifying and clearly defining the desired behavior the student is hesitant to engage in. This is the low-*p* behavior. For example, a student in a mathematics class may take a long time to begin working on multiple-digit addition problems, suggesting multiple-digit problems serves as a low-*p* behavior. The low-*p* behavior can be defined as any behavior that is not completing math problems during math instruction. Examples may include “off-topic conversations with peers, doodling, or wandering

around room” while nonexamples may include “orienting towards the worksheet and/or teacher, computing a problem, checking accuracy of work, and asking for clarification from a teacher or peer.” Selecting and defining the targeted low-*p* behavior lays the foundation for the HPRS. Other possible low-*p* behaviors may include initiating social interactions with a novel peer, writing story starters, beginning an academic task, or completing independent seat work. The importance of defining the behavior is so that all professionals who work with the student agree on what the low-*p* behavior is and is not to accurately measure progress. School psychologist Danielle Craaybeek is one professional who uses the HPRS strategy in her practice:

Lessons Learned

In my role as a preschool evaluator, I use high-probability tasks in order to help examinees complete testing tasks they may be reluctant or unwilling to attempt. If a child's interest lies with cars or trucks, I may introduce a child-preferred activity such as driving miniature vehicles in a play garage. As the child plays, I follow his/her lead and imitate what he/she is doing with the cars (e.g., driving up the ramps, parking the cars into the parking spots, etc.). I would then offer other play suggestions (e.g., having the car zoom through the car wash, driving the car on a play mat with a road/city scene) to see if the child would imitate my play sequences. After success with these play tasks, I introduce my testing blocks. I may build a tower in the middle of the road and then knock over the tower by crashing my car into it. Typically, if you have gained the child's interest and he/she feels successful, the child will imitate the play task. I then expand on the tower to include other block design test items (e.g., wall, bridge), always relating it to our road/car scenarios. Later, I may attempt to have the child transition to a drawing activity, such as imitating line and circular strokes, by pretending we are drawing “train tracks” or a “road” and then driving the toy car onto it, thus obtaining information on their early fine motor skills. (Danielle Craaybeek)

Teaching tips. Ensure that the low-*p* requests are tasks the student truly complies with 50% or less of the time. Once identified, a behavior only has validity if it enables observers to accurately capture what the behavior is and what it is not. As such, an operational definition of low-*p* behavior includes the following four elements: label, definition, examples, and nonexamples. A clearly defined low-*p* behavior will guide planning and implementation of the HPRS strategy.

Step #2: Generate a List of Several High-Probability (High-p) Behaviors That are Similar to the Desired Low-p Behavior

Once the target low-*p* behavior is identified, the teacher should make a list of behaviors similar in nature to the target

behavior for which the student has demonstrated a history of compliance. High-*p* behaviors are behaviors that the student can do and, as such, exist in the student's behavioral repertoire. These high-*p* requests are used to build momentum and feelings of success prior to making the low-*p* request. Similar in nature means that if the low-*p* is a physical movement such as a transition, then the high-*p* requests are also physical movements (see Table 1 for examples).

Teaching tips. To assist in the generation of potential high-*p* behaviors, consult with the student and those who know the student well to generate a list of high-*p* behaviors. Ideally, high-*p* requests should involve active student responding from the student (e.g., touch your head, draw a star next to the first problem you want to solve) and are similar in nature to the low-*p* behavior.

Step #3: Test the Behaviors by Giving the Requests 10 Times Each

To make sure the high-*p* requests will elicit compliance at a high rate, they should be tested. A minimum of 10 trials successfully completed eight or more times is recommended to ensure that the requests are truly high-*p* behaviors. Requests remain on the high-*p* list if the student complies 80% of the time in the testing phase. Momentum will not be achieved if the student either does not or hesitates to comply with the high-*p* request.

Teaching tips. After the list of potential low-*p* and high-*p* requests has been generated, test these tasks by presenting to the student a minimum of 10 times. Record if the student complies 80% or more on the high-*p* requests and 50% or less on the low-*p* requests. Students, and particularly older learners, can actively participate in testing the requests. For example, when presented with known and unknown language arts vocabulary flashcards, students can place flashcards in corresponding stacks of preferred and nonpreferred words. Student-friendly language can be used to categorize the stacks, such as, "I know these words now," and "I don't know these words yet." The same is true for preferred and nonpreferred social activities, writing tasks, and other classroom activities. Consider testing both the high-*p* and low-*p* requests frequently to ensure that they are functioning in the manner in which they are categorized.

Step #4: Administer Three to Five High-*p* Requests in Succession, Followed by Praise for Demonstrating the Target Behavior

Providing brief and frequent reinforcement is critical to the effectiveness of HPRS. The most common type of reinforcement used with HPRS in the literature is verbal praise.

Behavior-specific praise supports the student in understanding what he or she did to meet the expectation (see Ennis et al., 2018). Quick praise statements regarding effort or compliance are used following each high-*p* compliance, such as "Wow, you solved those problems quickly!" or "I like the way you followed three directions in a row!" Praise can be given after each high-*p* request or after the sequence of high-*p* requests based on the student's needs and performance.

Teaching tips. The speed in which the three to five high-*p* requests are delivered is important. We recommend delivering high-*p* requests in short succession (approximately 10 seconds apart) to build momentum. For each instance of student compliance to these high-*p* requests, provide behavior-specific praise within 30 s prior to delivery of the low-*p* request.

Step #5: Deliver the Low-*p* Request Within 10 Seconds of the Last High-*p* Response

For students to fully benefit from this strategy, the low-*p* request should be delivered quickly after the final high-*p* request to continue the momentum of success. If the student does not comply with the low-*p* request, repeat the sequence with three to five additional high-*p* requests and then make the low-*p* request again.

Teaching tips. The low-*p* request is delivered immediately following the delivery of reinforcement for completing the final high-*p* request. For example, if the low-*p* request is to transition to a new activity, the statement, "It's time to join the blue group" would be delivered immediately after a high five for completing the three high-*p* requests of, "Touch your nose, clap your hands, and touch your shoulder." Arizona speech-language pathologist Dana Mendez likes to use the HPRS strategy to allow her students to experience academic success:

Lessons Learned

I often give my students activities to feel successful, prior to asking them to complete a more challenging task. These high-probability requests help them to engage in that nonpreferred task. For example, a second grade student I work with is very frustrated with making the /s/ production. She has become compliant in most other tasks we complete as part of her behavior and pragmatic goals. This articulation error can be very frustrating for her, resulting in intentionally biting her tongue or yelling with frustration. To reduce this frustration, I will request she make another sound she is successful with first, for example, the (/t/t/t/) sound, then the /s/ sound. Using this strategy, she can feel successful prior to the difficult task. This helps to ease the transition to the nonpreferred target sound. This has greatly impacted her willingness to comply. (Dana Mendez)

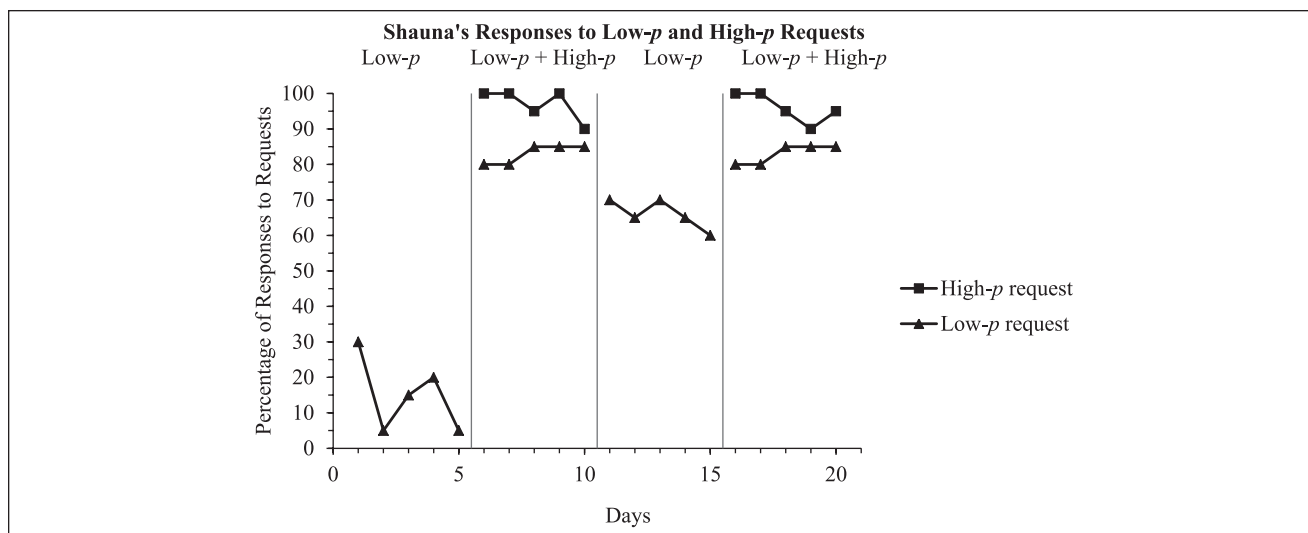


Figure 1. Sample graph demonstrating the implementation of the high-probability request sequence strategy with a hypothetical student named Shauna.

Note. Low- p = low-probability; high- p = high-probability.

Step #6: Praise the Low- p Behavior Upon Compliance or Demonstration

If the student attempts or complies with the low- p request, provide behavior-specific praise. Examples of behavior-specific praise include, “I like the way you showed interest in your peer by asking an on-topic question!” or “It is great that you wrote a sentence with at least 10 words about the paragraph we read.” The schoolwide reinforcement system can be used if one is available (e.g., “You earned a Panther buck for putting your materials away when requested!”). Praise that is authentic and immediately delivered following the low- p behavior will likely be most effective.

Teaching tips. Be sure to consider reinforcement preferences as attention gained from verbal praise is not reinforcing to all students (Wilder, Majdalany, Sturkie, & Smeltz, 2015). Other types of reinforcement may include tangibles, a token economy system, or time with an adult or peer of the student’s choice. Determine which type of reinforcement is most effective for each student based on individual preferences and characteristics. Consider conducting preference assessments to determine the type of reinforcement most likely to be effective. Different types of reinforcement may be paired with behavior-specific praise.

Step #7: Offer Stakeholders an Opportunity to Give Feedback on the Use of the High- p Strategy

We recommend that teachers take the time to ask students and, if appropriate, parents for feedback on the HPRS strategy for

supporting students’ learning goals. Feedback can be informal or formal. The teacher may ask students how they liked the HPRS strategy by using open-ended questions or gestural confirmation (e.g., thumbs up, thumbs down). A more formal measure may include the use of an individual questionnaire or survey. A social validity survey relevant to HPRS implementation may be accessed at ci3t.org/pl.

Teaching tips. Input from teachers and other stakeholders, such the student and parents, should be sought regularly to ensure that high- p and low- p requests truly are high- p and low- p behaviors, but also to ensure that the strategy is meeting expectations by producing desired changes. Before beginning implementation, involve students in the design and implementation of HPRS by assisting with the selection of low- p and high- p requests. You might show students their data to examine their level of responding to high- p and low- p requests and the impact HPRS has on increasing their responses to low- p requests. For example, see the sample graph in Figure 1 with an A₁-B₁-A₂-B₂ design (Phase A1 baseline and Phase A2 withdrawal) when HPRS was in place (Phase B1 the first introduction of HPRS and Phase B2 the second introduction of HPRS). In this hypothetical illustration, you might show the teacher, student, and/or parent the graph and explain to them what you have learned: “When we incorporated HPRS into Daily 5 instruction, Shauna showed high levels of responding across high- p and low- p requests. This is helpful to know what we can do in the classroom to help Shauna be even more successful in school.” After sharing what has been learned, stakeholders can offer data-informed feedback on their views about the goals, procedures, and outcomes associated with implementing HPRS.

Therefore, asking students about their experiences using HPRS may yield valuable information that can assist with the implementation of the strategy for other students. You and your colleagues can also share their HPRS experiences with one another.

In sum, it is possible to categorize these steps into before, during, and after HPRS implementation. For example, Steps 1 through 3 are completed by the teacher prior to delivering a HPRS. Steps 4 through 6 take place while delivering HPRS. Finally, Step 7 takes place after several days of incorporating HPRS. These easy-to-follow steps can be useful for creating a positive learning environment by allowing students to have fun with a transition, beginning a difficult activity by becoming comfortable at first, and/or building on the momentum of a few quick successes. A high school special education teacher who chose to remain anonymous uses the HPRS strategy to build prosocial academic compliance with students with EBD:

Lessons Learned

Students with emotional or behavioral disorders in my English 12 self-contained classroom often display noncompliance when presented with difficult academic tasks. When teaching the Canterbury Tales, I used the high-*p* strategy during vocabulary instruction to alleviate frustration and promote student success. The language of Geoffrey Chaucer is difficult for many students. We play flashcard games together in which three to five known vocabulary words are presented, followed by one unknown vocabulary word. When the words are presented in this manner, my students' frustration is alleviated, and they are exposed to more Chaucerian language. (High School Special Education Teacher)

Next Steps

We highly recommend that you visit ci3t.org/pl for additional free-access professional learning materials such as PowerPoint presentations and implementation resources (Common et al., 2016) to continue your learning on how to use HPRS. We also encourage you to visit the table of resources included in the introductory article of this special issue for other resources to continue your professional learning (see Lane et al., 2018).

Declaration of Conflicting Interests

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

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Holly M. Menzies  <https://orcid.org/0000-0002-0270-4656>

References

- Axelrod, M. I., & Zank, A. J. (2012). Increasing classroom compliance: Using a high-probability command sequence with noncompliant students. *Journal of Behavioral Education, 21*, 119–133. doi:10.1007/s10864-011-9145-6
- Banda, D. R., & Kubina, R. M. (2006). The effects of a high-probability request sequencing technique in enhancing transition behaviors. *Education and Treatment of Children, 29*, 507–516.
- Common, E. A., Lane, K. L., Oakes, W. P., Barnett, C. S., Ennis, R. P., & Menzies, H. M. (2016). *Low-intensity strategies: Using high probability request sequence to support instruction. A comprehensive, integrated, three-tiered model of prevention professional learning module*. Retrieved from <http://www.ci3t.org/pl>
- Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied behavior analysis* (2nd ed.). Upper Saddle River, NJ: Pearson Books.
- Council for Exceptional Children. (2014). *CEC standards for evidence-based practices in special education*. Arlington, VA: Author.
- Ennis, R. P., Royer, D. J., Lane, K. L., Menzies, H. M., Oakes, W. P., & Schellman, L. E. (2018). Behavior-specific praise: An effective, efficient, low-intensity strategy to support student success. *Beyond Behavior, 27*.
- Esch, K., & Fryling, M. J. (2013). A comparison of two variations of high-probability instructional sequence with a child with autism. *Education and Treatment of Children, 36*, 61–72.
- Faircloth, B. S., & Hamm, J. V. (2011). The dynamic reality of adolescent peer networks and sense of belonging. *Merrill-Palmer Quarterly, 57*, 48–72.
- Germer, K. A. (2018). Systematic review of high probability requests in K-12 settings: Examining the evidence-base. *Behavioral Disorders, 27*.
- Lane, K. L., Menzies, H. M., Ennis, R. P., & Oakes, W. P. (2015). *Supporting behavior for school success: A step-by-step guide to key strategies*. New York, NY: Guilford Press.
- Lane, K. L., Menzies, H. M., Ennis, R. P., & Oakes, W. P. (2018). Effective low-intensity strategies to enhance school success: What every educator needs to know. *Beyond Behavior, 27*.
- Lee, D. L., Belfiore, P. J., & Budin, S. G. (2008). Creating a momentum of school success. *Teaching Exceptional Children, 40*, 65–70. doi:10.1177/004005990804000307
- Losinski, M., Sanders, S., Katsiyannis, A., & Wiseman, N. (2017). A meta-analysis of interventions to improve the compliance of students with disabilities. *Education and Treatment of Children, 40*, 435–464.
- Mace, F. C., Hock, M. L., Lalli, J. S., West, B. J., Belfiore, P., Pinter, E., & Brown, D. K. (1988). Behavioral momentum in the treatment of noncompliance. *Journal of Applied Behavior Analysis, 21*, 123–141. doi:10.1901/jaba.1988.21-123
- Simonsen, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). Evidence-based practices in classroom management: Considerations for research to practice. *Education and Treatment of Children, 31*, 351–380. doi:10.1353/etc.0.0007
- Wilder, D. A., Majdalany, L., Sturkie, L., & Smeltz, L. (2015). Further evaluation of the high-probability instructional sequence with and without programmed reinforcement. *Journal of Applied Behavior Analysis, 48*, 511–522. doi:10.1002/jaba.218