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Abstract

Although the conceptual foundations of PBS at the universal level have been widely described and presented in the literature, secondary and tertiary interventions have been presented through very limited examples. This paper defines the key features of secondary and tertiary interventions and presents a decision-making process to guide schools through a continuum of strategies at these levels. The continuum is described in terms of a recursive loop, repetitively asking four questions: what is predictable about student failure, what is the simplest effective intervention, how can consistent implementation be achieved, and is it working? With each pass through this set of questions there is a steadily increasing focus on smaller groups and eventually individual students. The focus on the continuum of strategies at the tertiary level for individual students is presented through the lens of functional behavior assessment. A summary and recommendations for future study are included.

A founding premise of Positive Behavior Support (PBS) is that the structure and actions of systems, or "host environments" (Zins & Ponti, 1990) impact the behavior of individuals. In schools, the key to effective prevention is in the development of strategies that begin by affecting the actions of adults and environments, resulting in positive outcomes for students. Implementation of universal assessment and systemic prevention are based on a well-described conceptual

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foundation (Sugai et al., 2000), supported by numerous positive examples in the literature (e.g., Luiselli, Putman, & Sunderland, 2002; Nersesian, Todd, Lehmann, & Watson, 2000), and are generally sufficient to facilitate success among some 80% of students.

For the remaining 20% of students who have not demonstrated success, secondary and tertiary systems are indicated. Secondary systems have been loosely described as involving small groups of students whereas tertiary systems are focused on individuals (Sugai, Sprague, Horner, & Walker, 2000). However, descriptions of secondary and tertiary interventions have continually focused on specific strategies and processes (e.g., check-in check-out: Fairbanks, Simonsen & Sugai, 2008; Hawken, 2006; First Steps to Success: Walker, Kavanagh, Stiller, Golly, Severson, & Feil, 1997; Wraparound: Scott & Eber, 2003) rather than offering clear descriptions of a conceptual foundation or the development of systemic approaches in line with the multi-tiered logic of PBS.

The Office of Special Education Programs Center on Positive Behavior Interventions and Supports (OSEP PBIS) (2007) has recently published a research brief titled "*Is School-Wide Positive Behavior Support an Evidence-Based Practice? A Research Summary*." This document presents 43 separate references under research for secondary systems. Of these, 28 involve the *Behavior Education Plan* (Crone, Horner, & Hawken, 2004) or one of its components (e.g., Check-In Check-Out (CICO); Check and Connect). Eight others make reference to another commercially available program, *First Step to Success* (Walker, et al. 1997). Clearly, the Behavior Education Plan (BEP) and First Step to Success (First Step) have a strong evidence-base, accounting for 85% of all the identified studies. However, the range of problem issues and contexts represented by the number of students identified at this level is too great to be accommodated by such narrowly defined interventions.

The strength of PBS is its flexibility to include a wide-range of interventions as they best suit the needs of students. For example, students who respond well to adult attention are often the students who respond best to CICO as opposed to students who engage in problem behavior to avoid academic tasks (Hawken, MacLeod, & O'Neill, 2007; March & Horner, 2002). This means that students motivated by escape/ avoidance may not be impacted by CICO as an intervention. Additionally, both the BEP and First Step are programs aimed primarily at students with performance deficits. That is, both focus on increasing maintenance and generalization of behavior, assuming that students have the necessary skills within their repertoire. But while many students may demonstrate performance deficits, many others

may suffer from simple skill deficits, requiring more instructionally focused strategies for acquisition learning. Finally, a hallmark of PBS is seen in its focus on simpler strategies prior to moving the focus to more complex interventions. But this limited presentation of examples does not allow schools to move up and down a continuum of intensiveness. In other words, if there are interventions that require less time and energy than CICO, schools may not readily identify them for students at the secondary level.

Conceptual foundations of universal intervention have been widely described and presented in the literature, but secondary and tertiary interventions have been presented through these very limited examples. Therefore the purpose of this paper is to outline a decision-making framework to prescribe interventions at the secondary and tertiary levels and to present a range of strategies that better represent the variance of practices and procedures involved at these levels. Four steps in a decision-making strategy will be presented in detail for use at the secondary level and then adaptations for their use at the tertiary level will be presented.

Key Features of PBS Across Levels

PBS is neither a curriculum nor a program of prescribed strategies. Rather, it can be conceptualized as a framework under which systems identify predictable problems, select logical strategies to improve outcomes, facilitate consistent implementation, and use data to evaluate their success. Rather than looking at PBS as three separate phases, it is helpful to conceive of it as a sequence or continuum of processes and practices ranging from the most general universal strategies (i.e., rules, routines, and arrangements) to the most specific intensive interventions (i.e. functional behavior assessment and function-based intervention) (Baker, 2005). Clearly, the more effective the general strategies are, the less need there will be for the most intensive individualized interventions. Our purpose here is to provide further clarification of both the nature and sequencing of strategies that are applied across PBS systems. We propose four essential component steps in common across levels and equally applicable school-wide, among smaller subsets of non-responders, and for individuals experiencing the most chronic failures:

(1)   Prediction- the effective prediction of specifically identified problem behaviors and the contexts in which they typically occur in schools;

(2)   High-probability interventions- relationships, instruction and behavior management to efficiently and effectively increase student success;

(3)   Consistency- systemic consensus among faculty/staff to imple-
       ment and maintain agreed upon practices; and

(4)   Assessment- formative monitoring of important outcomes that
       are used in making data-based decisions.

These four elements may be more practically translated into four
key questions, detailed in Figure 1 that schools can use to enable this
process. Then the assessments in Step 4 create output data, which are
used to (1) evaluate the effect of the intervention, (2) identify non-re-
sponders, and (3) inform more precise prediction as 'data-in' for the
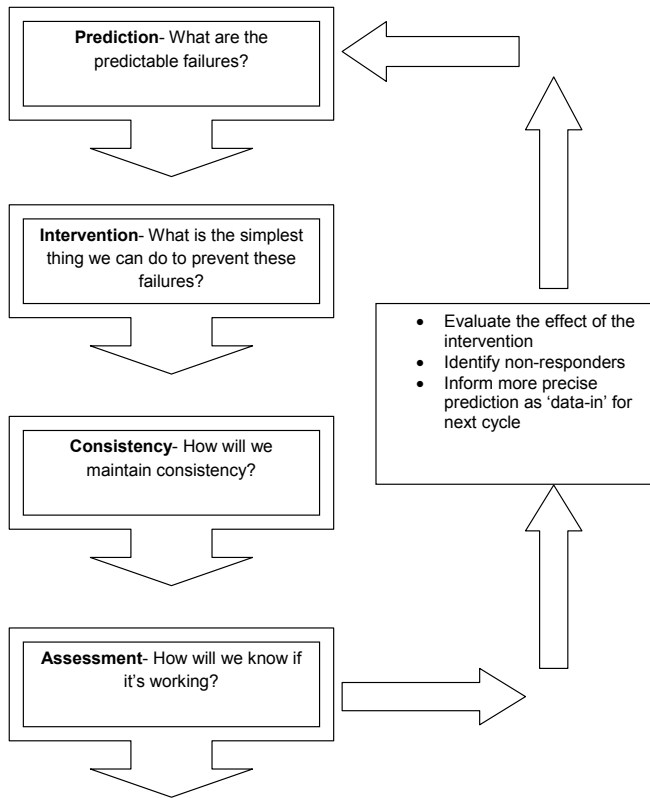next cycle.

Figure 1. Four-step Process

When data such as Office Discipline Referrals (ODRs), Minor Incident Reports (MIRs) and teachers anecdotal data collection, identify a group of students for whom universal interventions are not sufficient to facilitate success, the four steps are undertaken, with the focus on a subset of students rather than the school as a whole. Within this process, as evidenced with Step One- Prediction, the goal is a systematic, strategic set of interventions based on data. In this way, we use a common factor for this remaining 20% of students; the common factor is that *this group of students continues to experience behavioral failures.* We propose using these failures to guide the next set of interventions.

Thus, in a three-tiered model the process may be conceived of as a school-based evaluation mechanism in which input data consists of existing school-wide assessment and observation to predict when/where/why students will fail. This leads to the development of intervention strategies that are both logical to the problem and realistic to the stakeholders – enhancing both prevention and the necessary consistency of application. Secondary systems then involve gathering identified non-responders placing them back into the machine– which is recalibrated to predict failures for this smaller group. Tertiary systems involve a third pass through the machine, assessing and planning for those students who have been unresponsive to both primary and secondary interventions. However, at this third level students are entered into the machine one at a time – and the machine is calibrated to predict failure for each individual student. Clearly, this third pass through the machine will be more time consuming and complex, warranting assessment of a more diagnostic manner (e.g., functional behavior assessment). The following sections will describe each of these four steps in greater detail first at the secondary level and then at the tertiary level

Four Steps of the Decision-Making Process

Prediction

Current PBS models have put a premium on identifying which students are likely to need more intensive interventions but less emphasis has been placed on going beyond the question of *who* requires more intensive intervention. The key component of the first step is to expand the view of predictable behavioral failure beyond simply identifying which students will need more intensive interventions. This expansion goes on to include questions of: "what?" (as in what did the student do?), "where?" (as in where do these behaviors most commonly take place?), and "when?" (as in are there times when the behaviors are more likely to take place?). An additional logical question is to ask is "who else is around (peers and adults)?" Identifying

the future, predictable failures that students are likely to experience hinges on looking for these patterns of students' failures and there are a number of strategies for gathering this type of information.

First, gathering this information starts by asking and answering this basic set of what, where, when and with whom questions. Teachers often readily identify who is having behavioral failures but are less likely to identify when or where these behavior typically occur. Data can be collected through anecdotal notes, a review of office discipline referrals (ODRs), staff and student surveys and even targeted instances of direct observation. While ODRs have been the primary vehicle for making these types of decisions in current PBS models, lack of sensitivity to small changes in behavior is a potential shortcoming of office discipline referrals. Therefore, the use of minor incident reports (MIRs) that operate differently than a behavioral referral has been identified by some schools as a means to collect this data. The difference between MIR and ODRs is that while ODRs are typically created to facilitate punitive measures, MIRs are used primarily to gather data and facilitate prediction. A number of schools that the first and second authors have worked with extensively implementing PBS have reported the advantages of this type of form and therefore a sample template is provided in Figure 2.

After gathering this data, the PBS team and individual school personnel are charged with evaluating it to determine predictive variables leading to the implementation of effective and efficient interventions. For example, it may be observed that a decrease in the number of school personnel in a specific hallway has led to an increased number of MIRs, based on the answers of "Where? In the hallway." and "Who is around (or not around)? Enough school personnel to supervise," schools can put in less-intensive intervention strategies to address these behavioral problems for smaller groups of students. As these questions are answered, strategies based on this information can be formulated leading to the second step in the process.

High-probability interventions

Obviously making recommendations for specific interventions in this article is antithetical to this process, as they should be shaped by the answers determined in the prediction step of this process. However, broadly speaking, there are three main areas that can serve as guideposts leading to effective interventions. This entry level to secondary interventions is focused on consideration of teacher/student relationships, academic and skill instruction, and classroom management. As is the case in universal systems, focus on contextual variables (rules, routines, arrangements and interaction styles) reflect

Time _____Date_____Grade _____

Student(s) Involved _____

Reporting Staff Person _____

Incident

_____Homework   _____Disruption- Verbal Aggression

_____Tardy   _____Disruption- Verbal General

_____Non-Compliance   _____Disruption- Physical General

_____Off-task   _____Other

_____Out of Seat/ Out of Area

Location

_____Hallway   _____Outside- Dismissal or Arrival

_____Playground   _____Restroom

_____Room #   _____Cafeteria

Teacher Response

_____Redirection   _____Loss of Privilege

_____Physical Proximity   _____Parent Contact

_____Warning   _____Time-out in class

_____Detention   _____Parent Contact

Administrative

_____Private conference   _____Suspension

_____Time-out   _____Other

Comments:

Administrative Signature _____

Figure 2. Minor Incident Report

the simplest adaptations for facilitating success and thus are the most logical first step in prevention. There is great overlap here between primary and secondary strategies, as we generally would consider such basics as communication of rules to be in the realm of school-wide systems. However putting greater emphasis on student-teacher relationships is one logical connection to an effective set of secondary interventions.

Positive Relationships. To date, researchers have established a correlational connection between teacher-student relationships and student social competence such that better relationships are related to higher social competence (Birch & Ladd, 1997; Hamre & Pianta, 2001; Murray & Greenburg, 2000; Pianta & Nimetz, 1991; Pianta, Steinberg, & Rollins, 1995). Positive interactions with significant adult figures in the school environment are likely to foster competent acclimation to school, whereas stressful teacher-child interactions may create obstacles to successful adjustment. Students experiencing good or cooperative teacher interactions display fewer behavior problems than students experiencing poor or coercive teacher interactions (Hamre & Pianta, 2001; Murray & Greenberg, 2000; Birch & Ladd, 1997; Brophy & Good, 1989). Pianta (1996) notes "the asymmetry in child-adult relationship systems places a disproportionate amount of responsibility on the adult for the quality of the relationship" (p 73). Due to this asymmetry, Pianta suggests that it should then be the teacher's responsibility to initiate positive interactions with students in order to encourage positive relationship development.

Positive relationships between students and teachers are associated with fewer behavior problems (Hamre & Pianta, 2001; Murray & Greenberg, 2000). Indicators of a teacher's initiating and sustaining positive relationships include (a) tangible evidence of warmth, caring, and trust; (b) evidence of positive attention directed toward the student (e.g., recognizing special talents, encouragement during lessons, and the provision of emotional support); (c) instances of interest and participation in the student's activities and personal life; (d) truly listening to the student rather than just reacting to overt behavior; and (e) sensitivity to the referred student's situational messages and recognizing that setting events (e.g., health factors, neighborhood expectations, and the need to save face) influence behavior (Koenig, 2000; Monroe, 2006).

Effective Instruction. The job of the teacher is to design instruction so that students are likely to be successful. Student failures indicate a need for altering instruction. Simply insisting that students with histories of failure be responsible for turning things around by "trying harder" is illogical and will not promote success. The first question at

this stage is whether the student is capable of being successful with the academic expectations. Related to this, we must ask whether effective instructional practices are in place to facilitate high rates of student success. As a start, we may ask whether teachers are providing effective instruction by assessing whether and how they use (a) a meaningful rationale for each lesson, (b) multiple relevant examples and non-examples, (c) opportunities to practice with feedback, and (d) non-trained examples that allow students to successfully generalize skills (Heward, 1994; Nelson, Johnson, & Marchand-Martella, 1996).

Clearly, students who are unable to be successful with academic demands are less likely to have an incentive to comply with classroom directions. In the classroom, success during instruction is a natural reinforcer and maintains learned behavior (Kame'enui & Simmons, 1990; Skinner, 1968). However, for students with a history of failure, simply providing opportunities in the absence of differentiated instruction will be insufficient to foster success (Gable, McLaughlin, Sindelar, & Kilgore, 1993). Because both academic and social behaviors play a role in student success, both must be accounted for in an analysis of teacher-student behavior (Rosenshine, 1979). Further, because they are interrelated, desired academic and social behaviors must be given equal priority and taught with equal pedagogical vigor (Nelson, Johnson, & Marchand-Martella, 1996; Serna, Nielsen, Lambros, & Forness, 2000). Thus instructional practices addressing both academics and behavior and the appropriateness of the curriculum should be among the very first considerations for any students identified as not responding successfully to more universal interventions.

Classroom Management. Classroom management involves the array of strategies, practices, and procedures that teachers use to maintain an environment wherein instructional practices may be effective. The key consideration here is whether a student's problems might logically be related to the quality of classroom management. That is, might we reasonably believe that a more structured or well-managed classroom environment would alleviate at least a part of the student's identified problem? If so, such actions likely represent both the simplest and most proactive approach (Stichter, Lewis, Johnson, & Trussel, 2004). For example, research indicates that such basic classroom-based strategies as consistent routines, clearly communicated high expectations, frequent opportunities to respond, active engagement, use of prompts, and consistent consequences are highly associated with student success (e.g., Brophy, 1986, 1987; Crosby, Jolivette, & Patterson, 2006; Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008). In the absence of these best practices for classroom management, the impetus and extent of a student's problem behavior will be uncertain

and more intensive intervention quite possibly unnecessary. As most who have consulted on student behavior can attest, even the best intervention plans will have no impact when implemented in chaotic, unstable, or inconsistent environments.

These three considerations, positive relationships, effective instruction and classroom management, represent the first steps in moving from a focus on the school to a focus on identified problems. Schools can monitor the use of these guideposts in a variety of ways. Soliciting student feedback to assess the student perceptions of these relationships can be done through anonymous surveys, feedback groups and low-level data collection strategies (e.g. maintaining a frequency count of positive interactions across a class period). Peer mentoring between teachers and 'critical friends' networks can also be an effective way to evaluate instructional practices. Similar methods of assessment can be used for evaluating classroom management procedures. Thus, we see these contextual strategies as a bridge between primary and secondary interventions – providing a foundation for more intensive secondary and tertiary interventions should they become necessary.

Consistency

Consistency in this context can be defined as the implementation of interventions for identified students in the same manner across time and across school personnel. Using school-wide rules that are posted and taught using the same language by all school personnel is an example of this consistency at the universal level. The need for consistency in all issues of school discipline has long been established (Gable, Hester, Rock, & Hughes, 2009; Kerr & Nelson, 2006; Simonsen, et al., 2008). When students receive different messages from different adults in schools, this becomes a harbinger for increased behavioral difficulties from all students. Unfortunately while the need for consistently implementing the interventions is clearly critical, it can often atrophy for school personnel. This is especially true with prevention strategies. If prevention strategies are working, it is difficult to determine how they are working as it is impossible to measure non-events.

There are two main keys to maintaining the necessary consistency over time: simplicity of interventions and communication across team members. As this process is described, the need for a continuum becomes apparent as more common, less-intensive interventions are put in place first before school-wide teams move to more complex interventions. It is logical to conclude that common and practical interventions are more likely to be implemented consistently. These

practical interventions such as relationship-building through positive interactions, brief episodes of re-teaching or basic classroom management have much great potential to be implemented consistently both across time and personnel.

Also, consistency will hinge on clear communication across personnel. Brief meetings to check-in, and role-playing strategy implementation will also lead to greater fidelity. It is recommended that schools identify a team focused on secondary levels of implementation for student intervention within the school. This may be a new structure or an existing team, but time needs to be allocated at least every two weeks to focus specifically on individual student support (Crone, Horner, & Hawken, 2004; Scott, 2004). This team requires participation by an administrator, as well as persons knowledgeable with simple intervention strategies applied across students. If this is an existing team it will be important for the team to carefully evaluate their current practices and identify how the critical features of secondary systems will be incorporated. Central to this is using data to guide decision making related to the level or intensity of assessment and supports provided to individual students (Scott, 2004).

Within this discussion of consistency, the issue of fidelity also needs to be mentioned. Fidelity means that the interventions that are being implemented are being implemented correctly. In fact, it should be stated that without fidelity, consistency is rendered relatively useless. Thus it is equally important to implement behavioral supports with consistency and fidelity. In other words, no student is well-served with a staff that consistently implements an intervention incorrectly.

Assessment

The assessment step is very similar to the prevention step although the goal is now to identify what students are *still* struggling, when, where and with whom. Practical, feasible tools are also critical in the data collection process, particularly in schools where resources often don't allow for more intensive or rigorous forms of data collection. However, progress-monitoring tools must also be sensitive to student change if they are to effectively guide decision-making. A daily point card offers a more sensitive measure of student progress at the secondary level, while offering a feasible and flexible way to collect student data (Riley-Tillman, Chafouleas, & Briesch, 2007). Another advantage of the point card is that it can also be adapted for students requiring individualized, tertiary level interventions. While the daily point card is a central element to CICO, it could potentially be utilized across a variety of interventions to monitor student progress.

Data systems are not only necessary for monitoring individual

student progress, but can also be used to monitor system and intervention effectiveness. It is important to regularly evaluate the effectiveness of secondary interventions being used in a school (Anderson & Borgmeier, 2008). Important formative questions include (a) Are there enough students being referred to each secondary intervention to justify resources for a group intervention and (b) Does data suggest that a sufficient number of students are responding successfully to the group intervention? As data continues to be collected, the names of students who continue to struggle with behavioral goals are identified until schools can identify the top 1-3% of individual students who can then be targeted with tertiary intervention strategies.

Tertiary Interventions

When individual students have not responded despite the provision of effective academic and behavioral supports at the school-wide level and additional contextual considerations have been insufficient to facilitate success, additional intervention is warranted. As is the case at every level, secondary interventions will not meet the needs of all students and therefore vary in focus and complexity. Efficiency is a hallmark of secondary levels of prevention, with an emphasis on interventions designed to support multiple students at the same time (OSEP Center for Positive Interventions and Supports, 2004). At the tertiary level the focus shifts in the direction of more formal functional behavior assessment (FBA) and an increased focus on consequence-based intervention within the FBA process. Therefore in the name of efficiency and what is realistic in typical school settings, we believe FBA is best considered as a continuum of progressively more formal and intense procedures and practices that, while necessary for a small number of students, will be insufficient without continued application of both primary and secondary systems as part of a cumulative package of interventions. The FBA process continues to adhere to the same four decision-making steps but the intensity of the processes (predictive data gathering, logical and consistent interventions, and outcome data measurement) become more intensive as a student moves through the continuum of FBA formats. Thus, at the tertiary level, a student may pass through the same 4 steps repeatedly until a successful intervention is measured. Staying with the logic of the multi-tiered model, the first attempt at this level would represent the greatest simplicity and subsequent passes would be increasingly more complex out of necessity.

We believe that FBA is best considered in its own continuum of increasingly formal and complex processes and procedures, beginning with what we will term "consultation-based functional assessment"

and "team-based functional assessment" prior to "wraparound-based functional assessment." Because the literature is replete with many examples of FBA in a range of formats and complexities, we present here only brief descriptions of the processes and practices associated with each of these steps in the continuum as considered through the described decision-making process. Each of these is based on the premise of functional behavior assessment – assessing for relationships between the environment and behavior for the purposes of predicting when and why behavior occurs. However, the only purpose for FBA is to use the information to develop an effective intervention plan. In reality, we see tier of the multi-tiered model to involve the FBA logic of assess to predict then act to prevent. Still, as we move toward more individualized tiers and focus on students who have not yet favorably responded, the techniques we use to conduct the FBA will necessarily become more involved, intense, time-consuming, and expensive.

Consultation-Based Functional Thinking

As we move into more individualized interventions at the tertiary level, function plays an increasingly important role and becomes increasingly more intense, time consuming, and formal. As an initial consideration of an individual student and his or her unique relationship with the environment, the most logically efficient method involves simply sitting with a person who understands function and running through a strategically formulated set of questions, developed to identify possible functional relationships between student behavior and events/conditions in the environment. We have intentionally used the phrase "functional thinking" as opposed to functional assessment because we want to be clear that this level of processing is distinct from what typically has been referred to as FBA. However, this process is not conceptually different from the most formal version of FBA (see O'Neill et al., 1997), it is just that the process is simpler, less intense, and far less comprehensive. This process may be considered in five general questions, often referred to by the acronym ERASE (Park, 2007; Scott, 2003). In the first step, E = explain, the teacher describes the student's undesired behavior in observable and measurable terms (e.g., what does it look like, how often it occurs, duration, etc.). Second, R = reason, the consultant helps the teacher to consider why the student engages in the behavior – helping to facilitate testable explanations of function. Third, A = appropriate, the teacher selects a replacement behavior and teaches the student a better way to get the same function. Fourth, S = support, the teacher implements antecedents to make desired behavior more likely and

arranges consequences to help the student to get what he/she wants in the exhibition of desired behavior - and not get in the presence of un-desired behavior. Lastly, E = evaluate, the consultant helps the teacher to develop a simple method of recording and summarizing behavior so that progress may be evaluated at a future meeting. At this level the range of persons involved is small (consultant and teacher), the level of expertise is relatively low (school-based personnel), and structure is simple (ERASE). Clearly, there are many students for whom this simplistic level of functional thinking will be insufficient to accurately identify a maintaining function. In this case, the information gathered during this process becomes the foundation for a more intensive and involved assessment.

Team-Based Functional Assessment

This second level of FBA involves several unique features that have developed as an evolution of the previous step of function-based thinking. That is, although the steps are essentially the same as intro-duced in the ERASE format, the level of complexity is greater in sev-eral ways. First, involvement has expanded from the teacher to a team of number of persons familiar with the student. Second, the consul-tant role from the previous level expands to one of team leader. This person's role is to lead the team through the process in an efficient manner and to insure that all required steps are completed and agreed upon by the team. Third, assessment will be more formal and compre-hensive, including both structured interviews and direct observations. A range of protocol (e.g., *Functional Assessment Interview*, O'Neill et al., 1997; *FACTS*, March et al., 2000; *Team Meeting Record*, Scott, Liaupsin, & Nelson, 2005) are available to teams and may be selected on fa-miliarity, efficiency, or goodness of fit with the student/behaviors of concern. Fourth, the assessment process at this level involves formal hypothesis development, including both antecedent predictor vari-ables and maintaining consequence variables. These hypotheses are testable in nature and, based a team's confidence, may be informally verified via observations under a variety of naturally occurring condi-tions. Fifth, because interventions must be shared across team mem-bers, all decisions must be discussed and agreed upon by the team. Thus, at this level the responsibility for intervention has expanded to include all adults that come into contact with the student. Planning for such consistency is an essential component of a successful plan, but also is often one of the more difficult tasks. A well-structured protocol with prompts for decision-making and effective direction by the team leader will facilitate the consensus process. As with other components in the full continuum, should there be an inability to facilitate student

success, assessment, intervention, and evaluation completed at this stage become the foundation for the most complex FBA process to be undertaken in the next and most intensive iteration of the process.

Wraparound-Based Functional Assessment

Once again, this most complex version of FBA simply involves the same steps as were framed by ERASE in the context of functional thinking. At this stage, however, time and complexity are secondary considerations to the integrity and depth of processing necessary. It is also set apart by the number of individuals who are involved in the process not only from school but other areas of the student's life. The assumption at this final stage is that all else has been insufficient to foster student success and the current process may very well represent the last chance to break an escalating chain of failures. The literature most commonly refers to this all encompassing process as "wraparound" (Eber, Breen, Rose, Unizycki, & London, 2008; Eber & Nelson, 1997). Wraparound-based FBA involves the full range of school, family, & community and considers a full range of intervention options.

In describing wraparound for students with chronic behavioral failures, Burns, Schoenwald, Burchard, Faw, & Santos (2000) cite essential elements that have been widely recognized in the field. These elements include (1) strength-needs assessment, (2) child/family/school teaming with a collective vision, (3) related goals that reflect the voice and culture of the youth and family, (4) measurable outcomes that are monitored on a regular basis, (5) The importance of system structures to lead and manage wraparound implementation across service sectors, (6) clearly defined targets, and (7) flexibility across disciplines. (VanDenBerg & Grealish, 1996; Goldman & Faw, 1998). If we are committed to supporting those students who pose the most complex and challenging behavioral concerns, those students who require comprehensive assessment and wraparound supports, there are limits to how efficient we are able to be. Our efficiency can certainly be addressed in our effectiveness and efficiency to provide supports to students who don't require the most intensive levels of support. The question for our most challenging students may not be how to identify and provide support, but how much, in terms of resources, is necessary if we are committed to supporting those students presenting the most challenging behavioral concerns.

Recommendations

We believe that, within a system of school-wide positive behavior support, effective intervention for students with challenging

behavior is a function of both the array of interventions available along the continuum of interventions and the fluency with which schools are able to select and implement in an efficient manner. While many such efforts have been demonstrated, these examples tend to have been piecemeal and of limited scope. The literature continues to exemplify secondary and tertiary systems solely by very distinct and limited examples. The full range of available secondary and tertiary interventions will be guided by the same conceptual foundations that define universal. We wish to offer a general set of recommendations for research as a means of generating the empirical demonstrations to help lead schools toward more systematic efforts with students who are not responding to school-wide efforts.

Perhaps one way we might restructure how secondary and tertiary intervention are selected and implemented is to consider a continuum that begins with antecedent interventions (e.g., change the environment, routines, and teacher behaviors) as a first level. These strategies represent both the simplest first effort and also provide a foundation on which to build any further interventions that might be necessary. That is, even the most well-conceived function-based intervention is unlikely to be successful in the absence of a sound teacher-student relationship, effective management, and solid instructional practices. Research must be undertaken to define the essential features of positive teacher-student relationships and to study both the assessment and training of these features. We believe that evidence strongly suggests that ignoring such variables jeopardizes the effect of all our other interventions. Thus, these serve as the foundation for secondary interventions, both systemic and small group, and the continuum of function-based intervention. Table 1 serves as a summative presentation of the continuum of strategies that have been described.

In order for such a reconceptualization to be implemented with sustainable fidelity several issues must be addressed by the research and demonstrated as part of the PBS systems approach. First, the extended secondary-tertiary continuum increases the functional choices for intervention that are available to address the needs of non-responders. As such schools will need to clearly develop both their teaming process for assessing these students and clarify a set of data-based decision rules for determining which intervention avenue best fits any particular student. The tenets of effective teaming and assessment are well defined, although each school will need to develop structures that are compatible with individual contexts and personalities. While the continuum is hierarchical in terms of intensity, it also includes variations at a single level that will be necessary to address a wide variety of student needs. Research must strive to develop and validate the most effective and efficient processes and procedures for

Table 1.

Summary table of interventions continuum at the secondary and tertiary levels of PBS

Primary/Secondary Level

Focus	Key Features
Secondary Interventions	
Positive Relationships	Cultural and communication issues are considered to create positive relationships between teachers and students as they interact across school settings.
Effective Instruction	Problem contexts include effective instructional practices such as explicit directions, modeling, prompting, guided practice, opportunities to respond and feedback.
Effective Management	Problem contexts include effective management practices such as consistency, encouragement, proximity/movement and contingent consequences.
Tertiary Interventions	
Consultation-Based Functional Thinking	Teachers meet with school consultant and discuss student behavior to identify possible functions. Simple intervention plans are implemented with focus on antecedent manipulations.
Team-based FBA	All teachers familiar with student meet and discuss student using both direct and indirect FBA measures to identify possible function. Behavior plans are implemented across all settings.
Wraparound-Based FBA	Team of relevant school, community, and family persons uses a wide range of assessments to identify functions across settings and develop behavior plans that are implemented across life domains.

Tertiary Level

organizing data and making decisions.

These issues lead directly to a second area in need of study and development. Because curriculum-based measures are not as easily gathered for social behavior as they are in the academic realm, more work needs to be done to identify methods of monitoring student behavior for decision-making at the secondary level. For example, how will we know when and whether social skills interventions or homework club have been sufficient? Procedures for databased decision-making as evaluation of secondary interventions must be developed and studied. Certainly, technology will play a role in this and there is a great need for more comprehensive behavioral assessment in the same manner that reading assessments have been more recently been developed. Third, structural analysis must be further studied as a procedure for informing the development of antecedent intervention strategies. The same logical and empirical framework supporting FBA provides a foundation from which to study how structural assessments may implemented in a simple manner in classroom contexts. Simplification of such strategies would allow for far more precision in the development of initial antecedent interventions. Finally, attention to the efficiency of FBA for use in classroom settings must be continued. Widespread use of FBA at either the latter part of secondary intervention or throughout tertiary intervention is dependent upon the efficiency with which valid outcomes can be assessed. We believe that research focused on both efficiency and effectiveness will be essential to the eventual conceptualization of secondary and tertiary systems as continuum of practices that are designed to lead to the simplest possible intervention to achieve positive results.

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