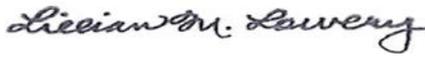




Lillian M. Lowery, Ed.D.
State Superintendent of Schools

200 West Baltimore Street • Baltimore, MD 21201 • 410-767-0100 • 410-333-6442 TTY/TDD • MarylandPublicSchools.org

TO: Members of the State Board of Education

FROM: Lillian M. Lowery, Ed.D. 

DATE: February 25, 2014

SUBJECT: Report of Best Practices in School Discipline

PURPOSE:

To request the State Board of Education accept the *Report on Best Practices in School Discipline*.

BACKGROUND:

The Maryland State Board of Education issued a ground breaking report in July 2012 outlining its discipline reforms, “School Discipline and Academic Success: Related Parts of Maryland’s Academic Reform”. The reforms were borne out of reviews of a number of cases brought forth to the Board, research on suspensions and expulsions, and public comment and forums. The goals of the Board’s reform efforts are to acknowledge that in order to create a “world class education system” that prepares “all students to be college and career ready” students need to be present in school. As such, suspension and expulsion are to be used as a last resort and even when used, students will continue to be connected to the school building. The Board emphasized that “school discipline and academic success are “equal parts” in their reform efforts.

To achieve the link between school discipline and academic success, the Board is enacting eight reforms, which include:

- Taking a pro-social approach to discipline and adopting new discipline regulations.
- Requesting the State Superintendent of Schools to convene a Best Practices in School Discipline Workshop to assist schools in adopting a pro-social approach to discipline and determine the types of professional development needed by teachers and administrators, as well as training programs for school resource officers.
- Requesting the State Superintendent of Schools to reconvene the Student Code of Conduct Workshop, with a focus on identifying what would constitute violent versus nonviolent offenses.
- Directing MSDE to develop a method to analyze disproportionate impact for minorities and disparate impact for students with disabilities receiving specialized instruction in accordance with an Individualized Education Program (IEP).

- Adopting a regulation requiring school systems to provide minimum education services to all students suspended/expelled out of school.
- Adopting amendments to the school discipline regulations that focus on a timely discipline process and the return of a student to school after serving the term of suspension, even if an appeal is still pending.
- Directing MSDE to collect data on school arrests and referrals to the criminal justice or juvenile justice systems.
- Directing the State Superintendent to work with school systems to identify which schools would need to implement Positive Behavioral Interventions and Supports (PBIS) at the secondary and tertiary levels.

SUMMARY:

This report is the result of the State Superintendent of Schools' directive to convene a Best Practices in School Discipline Workgroup to assist schools in adopting a pro-social approach to discipline and determine the types of professional development needed by teachers and administrators, as well as training programs for school resource officers.

The report is the summary of the work of the Best Practices in School Discipline Workgroup. The Workgroup convened in November of 2012 and is comprised of school-based education professionals and child-serving agencies with direct experience in school discipline and student behavior, as well as community representatives from the public education professional associations, teachers' unions, child-serving agencies, and researchers in school discipline initiatives. In addition, the Workgroup consists of Maryland State Department of Education (MSDE) staff with experience in instruction and curriculum, professional development, coordinated student services, special education, certification, and early childhood.

The report is divided into three areas: research, best practices, and professional development which respectively provides the "why", "what" and "how" to school discipline best practices. Recommendations are shared for each of the three areas. The report also offers the historical perspective of Maryland's disciplinary policies, identifies websites that contain evidence-based practices, describes successful frameworks for implementing programs and addresses best practices in professional development.

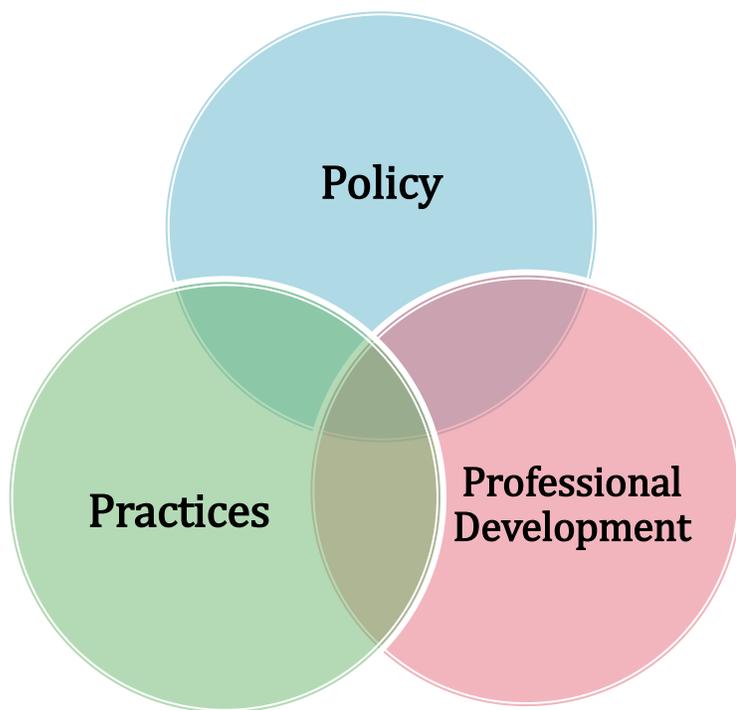
ACTION:

Accept the *Report on Best Practices in School Discipline* and its recommendations.

LML:AA

Attachments

Report on Best Practices in School Discipline



February 2014

Lillian M. Lowery, Ed. D.
State Superintendent of Schools

Charlene M. Dukes, Ed. D.
President, Maryland State Board of Education

Martin O'Malley
Governor

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Note from the Co-Chairs

In July 2012, the Maryland State Board of Education (Board) issued a report, School Discipline and Academic Success: Related Parts of Maryland's Academic Reform, outlining its desire to implement discipline reforms. The Board tasked the Maryland State Department of Education (MSDE) to establish a statewide workgroup to explore best practices in school discipline that could help to guide the reforms. The charge of the workgroup was to identify school discipline best practices to assist with implementing a pro-social approach to discipline and identify the professional development needs of teachers and administrators, as well as training programs for school resource officers.

As the co-chairs of the workgroup, we are pleased to present this report, the effort of a forty-eight member workgroup (See Appendix A). The workgroup conducted an extensive literature review, consulted with experts in the field, and developed this report. Workgroup members established at the initial meeting that this document would be a comprehensive yet usable reference for school personnel. Throughout the year-long process, the workgroup members were committed to the Board's charge.

The workgroup found it important to balance both the research and practical application of research in this guidance document. In taking a pro-social approach to discipline, the workgroup focused on preventative strategies as well as disciplinary actions that are both educationally based and fair. A multi-tiered system of interventions is used to frame discipline practices. It is through this framework that the goal of a learning approach to discipline can be balanced with strategies to intervene. Also, key to the workgroup was the need for all stakeholders to be fully engaged in the process at all levels of prevention and intervention including teachers, administrators, parents, and students. Professional development for school staff is critical to ensuring full engagement and appropriate implementation of preventative discipline strategies. This report suggests that professional development is not only an initial training issue but should be an ongoing process that is job embedded to be most effective in having an impact on student learning and achievement.

While reading and processing the materials in this report, it is critical to prioritize the use of culturally competent strategies as policy is developed, practices are implemented, and

professional development is provided. This ensures that the issue of equity is front and center as improvements are made to Maryland's disciplinary process.

This report is the carefully considered work of its members. The chairpersons would like to thank the workgroup members for the dedication and professionalism demonstrated while developing this report. In addition, we would like to thank the University of Maryland's School Psychology Program for their literature review, research, and workgroup participation. This report demonstrates the combined effort of its members to synthesize the research and practice in the field of discipline to assist all stakeholders.

Ms. Janice Briscoe, Special Projects Officer
Division of Student Services
Prince George's County Schools

Dr. Sally Dorman
Former Team Leader, School Safety and Climate
Maryland State Department of Education

Co-Chairs, Best Practices in School Discipline Workgroup

Executive Summary

After several years of studying the discipline process across the state, the Maryland State Board of Education (Board) issued a ground breaking report in July 2012 outlining its discipline reforms, School Discipline and Academic Success: Related Parts of Maryland’s Academic Reform. The reforms were borne out of reviews of a number of cases brought forth to the Board, research on suspensions and expulsions, and public comment and forums. The goals of the Board’s reform efforts are to acknowledge that in order to create a “world-class education system” that prepares “all students to be college and career ready” students need to be present in school. As such, suspension and expulsion are to be used as a last resort and even when used, students will continue to be connected to the school building. The Board emphasized that school discipline and academic success are “equal parts” in their education reform efforts.

To achieve the link between school discipline and academic success, the Board is enacting eight reforms, which include:

- Taking a pro-social approach to discipline and adopting new discipline regulations.
- Requesting the State Superintendent of Schools to convene a Best Practices in School Discipline Workgroup to assist schools in adopting a pro-social approach to discipline and determine the types of professional development needed by teachers and administrators, as well as training programs for school resource officers.
- Requesting the State Superintendent of Schools to reconvene the Student Code of Conduct Workgroup, with a focus on identifying what would constitute violent versus nonviolent offenses.
- Directing Maryland State Department of Education (MSDE) to develop a method to analyze disproportionate impact for minorities and disparate impact for students with disabilities receiving specialized instruction in accordance with an Individualized Education Program (IEP).
- Adopting a regulation requiring school systems to provide minimum education services to all students suspended/expelled out of school.
- Adopting amendments to the school discipline regulations that focus on a timely discipline process and the return of a student to school after serving the term of suspension even if an appeal is still pending.
- Directing MSDE to collect data on school arrests and referrals to the criminal justice or juvenile justice systems.

- Directing the State Superintendent to work with school systems to identify which schools would need to implement PBIS at the secondary and tertiary levels.

The report is divided into three areas: research, best practices, and professional development. The research section provides the “why”, the best practices section provides the “what”, and the professional development section provides the “how”. Recommendations are shared for each of the three areas. The report also shares the historical perspective of Maryland’s disciplinary policies, identifies websites that contain evidence-based practices, describes successful frameworks for implementing programs, and addresses best practices in professional development.

A summary of the process of each sub-group and resulting recommendations are provided below.

Summary and Recommendations for Research

This subgroup explored the history of the 1994 Gun-Free Schools Act, its impact on current school discipline practices, and the APA’S Zero-Tolerance Task Force (2008) report which determined that “zero-tolerance policies have failed to achieve the goals of an effective system of discipline”. In addition, the federal and state mandates that effect discipline practices in Maryland were also reviewed, including IDEA, NCLB, etc. As a result of this intensive review of existing policy effecting school discipline, the following recommendations are put forth:

- Utilize the policies in place both federally and at a state level to frame the development of local discipline policies.
- Develop local policies that are rooted in data-based decision-making to guide staff and administrators in disciplinary practices and systems.
- Develop discipline policies that promote an educational learning approach rather than a punitive approach.
- Communicate the policies to all stakeholders prior to discipline events arising.
- Engage all stakeholders before, during, and after a discipline event.

Summary and Recommendations for Practices: Multi-Tiered Systems of Support

Most significant to the members of this sub-group, is the need to create environments in which positive relationships between adults and students are foundational. This speaks to the experience of the members as well as the research that reveals that meaningful, supportive, and positive adult-student relationships impact students' engagement and connectedness to school. Further, such relationships are best achieved through a systems-based approach to prevention and early intervention (Demaret & Van Houtte, 2012; Hamre & Pianta, 2001; Murray & Malmgren, 2005). The team recommends systemic strategies that support the implementation of specific best practices that can be found at university and federal online sites. In accordance with this review, the following comprehensive strategies are put forth as recommendations:

- Focus on school-wide prevention and early intervention through multi-tiered systems of support in order to maximize school-wide performance and to minimize the need for intensive interventions.
- Establish standards of leadership to: ensure staff buy-in, clearly define measurable goals and expectations for students and staff, develop and implement curriculum to teach those expectations, and devote resources to relevant interventions chosen through data-based decision rules.
- Transform punitive practices to pro-social supportive behaviors that reinforce desirable behaviors and outcomes.
- Assess the purpose or function of disruptive behaviors prior to implementing an intervention.
- Utilize a real-time data system to track effectiveness of interventions and monitor the need for additional supports (for both students and staff).
- Consider utilizing the Maryland Safe and Supportive Schools (MDS³) School Climate Survey to measure progress in the components that make up school climate (environment, safety, and engagement).
- Select evidence-based practices from the What Works Clearinghouse (<http://ies.ed.gov/ncee/wwc/>); considering match for demographics, grade level, intensity of intervention needed and contextual fit.
- Institute policy to make removal of students from the classroom a last resort after appropriate interventions are documented and exhausted.
- Use the Implementation Science Framework from the National Implementation Research Network to monitor implementation fidelity and track results of interventions at all levels to determine the adequacy and effectiveness of systems in place.

- Network with interdisciplinary and interagency partners to maximize efficient use of funds and other resources.

Summary and Recommendations for Professional Development

Maryland has a strong foundation of professional development implementation practices that provide a framework for delivering pro-social outcomes, “effective outcomes are dependent upon effective intervention and effective implementation practices” (Brown & Flynn, 2002; Clancy, 2006). This group addressed Maryland policy, regulation and resulting practice related to professional development with a focus on the Universal Design for Learning; professional learning and ethical practice, challenges to discipline reform, pre-service strengths and challenges; and, school resource officer programs.

In accordance with the review, recommendations are put forth in three areas; relationship building, resources and training, and implementation teams.

Relationship Building

- Incorporate evidence-based strategies that specifically address relationship building such as those provided through Social Emotional Foundations for Early Learning (SEFEL). While SEFEL specifically focuses on early childhood settings, the strategies can be adapted to support student learning throughout their school career, K-12.
- SEFEL is currently developing training for first responders to support their interaction with young children. Expand SEFEL training for first responders to include school resource officers with a focus on developing relationships and rapport within the school community.

Resources and Training

- Work with institutes of higher education to consider adding the requirement of a course in behavior management as part of teacher certification in Maryland.
- Work with institutes of higher education to provide a selective certification track for a “Behavior Specialist” with appropriate multi-tiered coursework.
- Publicize Maryland resources for response to behavioral crisis such as provided by Crisis Prevention Institute (CPI).
- Work with the directors of student support services to develop and provide training for school administrators to change the preferred response to a discipline referral from punishment to providing student supports.

- Support a selective certification track for Maryland school resource officers (SROs) with appropriate multi-tiered coursework. Applicants for SRO certification should be seasoned patrol officers who work well with little supervision, are highly productive; have low sick leave usage, and are highly ethical and moral persons. Courses would be progressive and ongoing with an extensive basic SRO course as the foundation with an annual re-certification course. Supplemental coursework would provide additional certification levels for advance policing in schools, supervising police in schools, and a school resource officer instructor level.

Implementation Teams

- Recognize the leadership capacity of the student support team (SST) in reducing of out-of-school suspension and consider the revision of current office referral systems.
- Require building leadership to set annual school climate goals and establish accountability measures to ensure goals are met.
- Make the establishment of school climate implementation teams, PBIS and SEFEL or comparable, a priority. Consider elevating the importance of a positive climate by requiring schools to provide a climate status report to their local school board of education at least annually, if not quarterly.
- Work with institutes of higher education to create a rubric for selecting supervising mentors for student teachers and novice teachers. Include classroom coaching and goal setting for behavior and discipline.
- Set aside a portion of the school budget to support implementation of a positive school climate. National Implementation Research Network (NIRN) research recommends a fifteen percent set-aside to support implementation.

This report and the recommendations therein align with the regulations and are respectfully submitted to advance the Board's ground-breaking work around student discipline.

Introduction

The Maryland State Board of Education (Board) has challenged itself and local school systems throughout the state to create a “world class education system” that prepares all students to meet Maryland’s College and Career Readiness Standards. To realize this challenge, Maryland must create schools that are safe, supportive and engaging, so that students come to school every day.

The Board requested that the State Superintendent of Schools convene a Best Practices in School Discipline Workgroup (Workgroup) to assist schools in adopting a pro-social approach to discipline and determine professional development needs of teachers and administrators, as well as training programs for school resource officers.

This report is the summary of the work of the Workgroup. The Workgroup convened in November of 2012 and is comprised of school-based education professionals and child-serving agencies with direct experience in school discipline and student behavior, as well as community representatives from the public education professional associations, teachers’ unions, child-serving agencies, and researchers in school discipline initiatives. In addition, the Workgroup consists of Maryland State Department of Education (MSDE) staff with experience in instruction and curriculum, professional development, coordinated student services, special education, certification, and early childhood.

Prior to the first Workgroup meeting, MSDE staff initiated a literature review with resources presented in three areas: policy, practices, and professional development. Dr. William Strein, director for the University of Maryland’s School Psychology Doctoral Program, led a full literature search on best practices in school discipline. Four doctoral students in school psychology staffed the project and conducted the literature review for background to this report. These resources were sent to all members of the Workgroup. The Workgroup met on four occasions to inform and frame the work to be completed. The agreed upon work plan began with presentations on best practices and promising discipline practices across the state which informed the document outline. Three Workgroup meetings were conducted with select

presentations from schools, administrators, implementers of specific interventions, and researchers.

Following the large group presentations members broke into three smaller subgroups according their particular interests: policy/research, practices, and professional development. The writing of the document commenced over the summer months and the document was vetted through the full workgroup membership late in the summer of 2013.

The Research

Zero Tolerance

In 1994, the federal government enacted the Gun-Free Schools Act, mandating that each state receiving federal funds must expel students found with firearms for a minimum of one-year. The passage of the Gun-Free Schools Act initiated a shift in school discipline towards zero-tolerance policies. Zero-tolerance policies punish students harshly for major and minor infractions, hoping to send a message to students that certain behaviors will not be tolerated (Skiba et al, 2008). Although zero-tolerance policies were designed to achieve safe schools, they have been criticized in recent years due to increased numbers of suspensions and expulsions at the national, state, and local levels. In Maryland, about eight percent of public schools students were suspended or expelled in the 2010-11 school year, and fifty-four percent of all students suspended out-of-school were suspended for non-violent offenses (Maryland State Department of Education Suspension Expulsions and Health Related Exclusions Report, 2012).

The increasing numbers of students being suspended or expelled out-of-school is concerning because these students are less likely to graduate and more likely to be funneled into the criminal justice system. According to the Vera's Center on Youth Justice (CYJ) , “studies show that students suspended or expelled from school under zero-tolerance policies are more likely to be arrested within one year than those not subjected to such punishments” (2012). Additionally, a 2011 study conducted by the Public Policy Research Institute at Texas A&M University found that nearly sixty percent of all seventh grade students in the years 2000, 2001, and 2002 were suspended or expelled at least once. The students who were suspended or expelled were more likely to repeat a grade or drop out of school than students not involved in

the disciplinary system (Fabelo et al, 2011). Research has termed this phenomenon the “school-to-prison pipeline”.

Zero-tolerance policies have also had a disproportionate impact on minority students and students with disabilities. National suspension rates, based on data for students in grades K-12 in school year 2009-2010, show that seventeen percent (17%), or one out of every six Black school children enrolled in grades K-12, were suspended at least once. This statistic is much higher than the one in thirteen (18%) risk for Native Americans; one in fourteen (7%) for Latinos; one in twenty (5%) for Whites; or the one in fifty (2%) for Asian Americans. Additionally, students with disabilities were twice more likely to be suspended than their non-disabled peers. Most concerning, twenty-five percent (25%) of Black children with disabilities enrolled in grades K-12 were suspended at least once in 2009-10 (The Civil Rights Project at UCLA, 2012).

In response to the failure of zero-tolerance policies, the Department of Justice launched the Supportive School Discipline Initiative in July of 2011. The goals of the initiative are: 1) increasing the use of data-based decision-making, 2) advocating for alternative disciplinary programs that protect students’ civil rights, 3) ending disproportionate disciplinary practices, and 4) preventing the school-to-prison pipeline.

One local school system in Maryland, Baltimore City Public Schools, has made significant progress in school discipline reform. In April 2007, Baltimore City Public Schools began a project to revise the student code of conduct. The new code emphasizes classroom interventions and strategies to prevent discipline problems and sets uniform guidelines for all schools. The code, implemented in the 2009-10 school year, resulted in a significant reduction in suspensions. The Maryland State Board of Education's report: School Discipline and Academic Success Report (2012) cites that the number of suspensions fell from 16,752 during the 2006-07 school year to 9,712 during the 2009-10 school year, a reduction of fifty-eight percent (58%).

Risk Behaviors Associated with Grades Earned

Recent studies have highlighted the interconnectedness of academic and social/behavioral outcomes. Given the opportunity, many students will disclose their risk behaviors when participating in an anonymous survey. Per an article published in the January 2013, *Journal of*

Behavioral Health, an analysis of Rhode Island Youth Risk Behavior Survey samples from across the years 2007, 2009 and 2011 indicates:

“ Students who had been in a physical fight (past 12 months), were ever hit/slapped by a boyfriend/girlfriend, felt sad/hopeless for 2+ weeks (past 12 months), were current smokers (past 30 days), were current marijuana users (past 30 days), ever had sexual intercourse, perceived themselves as overweight, had insufficient physical activity (less than 60 minutes per day, 5 days per week), or played video games 3+ hours per school day were more likely to self-report obtaining low grades than students without these risk behaviors. Poor academic achievers are more prevalent among students of both sexes who participate in high-risk behaviors even after adjusting for other confounding effects”.¹

Statutes and Regulations

Recognizing that students who are not in a safe environment will not be successful in school, the Elementary and Secondary Education Act (ESEA), reauthorized as the No Child Left Behind Act of 2001, set forth a number of discipline related requirements for local education agencies that receive federal funding. The Safe and Drug-Free Schools and Communities portion of ESEA, Title IV, Part A provide an assurance that schools have “a plan for keeping schools safe and drug free” [20 U.S.C. §7114(d)(7)]. The plan should include:

- A. Security procedures at school and while students are on the way to and from school;
- B. Prevention activities that are designed to create and maintain safe, disciplined, and drug-free environments;
- C. Crisis management plan for responding to violent or traumatic incidents on school grounds; and
- D. Code of conduct policy for all students that clearly states the responsibilities of students, teachers, and administrators in maintaining a classroom environment.

This piece of the federal act set the standard for all schools in Maryland. In the case of the Workgroup, this legislation reinforced the charge of the Workgroup as well as that of the Code of Conduct Workgroup. It is important to note other school staff, including school resource

¹ Jiang Y, Mermin J, Perry DK, Hesser JE. The relationship of multiple, simultaneously occurring health risk behaviors to academic performance of high school students. *J Behav Health*. 2013; 2(1): 44-51.

officers and student services’ professionals, and parents also play an important role in providing a safe and drug free school and community.

Federal law also requires MSDE to collect and examine data to determine if significant disproportionate representation of students with disabilities (by disability and race and ethnicity) is occurring in the state and local school systems with respect to the incidence, duration, and type of disciplinary action, including suspensions and expulsions [20 U.S.C. §1418(d)(1)(C)].

The Board has, through its discipline reforms, directed MSDE to develop a way to analyze disproportionate impact for all students outside of the federal requirements for students with disabilities. MSDE will begin to report on this data in 2015.

Table1 describes Maryland statutes pertaining to school discipline and safety in the education article of the Annotated Code of Maryland.

Table 1

Statute	Summary
Arrests for Reportable Offenses (§7-303) Arrests for Reportable Offenses (§7-303);	Provides notification to superintendent, principal, or school officer within 24 hours of the arrest of a student for a reportable offense; if the offense involves rape or sexual offenses the student may not attend the same school or ride the same bus as the victim; information related to the reportable offense is used to provide for appropriate educational services and to create as safe learning environment; and each public school grades 6-12 shall designate one school security officer.
Special Programs for Disruptive Students (§7-304),	Each county board of education shall provide a continuum model of prevention and intervention activities and programs that encourage and promote positive behavior and reduce disruption.
Positive Behavioral Interventions and Support Programs (§7-304.1),	Establishes PBIS as a research based systems approach adopted by the State Board to build capacity among school staff to create positive learning environments for teachers and students. It establishes cutoff rates of suspension and truancy for schools to implement PBIS or other alternative behavior modification programs to address suspension and truancy issues.
Suspension and Expulsion(§7-305),	Limits suspension to 10 days, does not allow suspension for attendance-related offense; requires a principal to notify the county superintendent in writing of suspensions of more than 10 days; requires students expelled or suspended to remain away from school premises; and requires the principal or designee to consult with teacher referring student prior to the student’s return to school.
Corporal Punishment; State Code of Discipline (§7-306)	Eliminates the use of corporal punishment; instructs the State Board of Education to establish guidelines that define a State Code of discipline for all public schools, including standards of conduct and consequences for violations of the standards; assistance to county boards with the implementation of the guidelines; establishes that each county board shall develop their own discipline regulations and requires the regulations to include provision for education and behavioral interventions,

Statute	Summary
	counseling, and student and parent conferencing, as well as alternative programs, including in-school suspension, suspension, expulsion, or other disciplinary measures deemed appropriate.

In addition to the Annotated Code of Maryland, Table 2 illustrates discipline and attendance regulations that the Board has adopted, implemented, and/or revised.

Table 2

COMAR	Summary
Guideline for Students' Responsibilities and Rights (13A.08.01.10)	Requires each local board of education to have a document on students' responsibilities and rights that is disseminated periodically to all members of the school community, including students, teachers, administrators, and parents or guardians.
Disciplinary Action (13A.08.01.11)	Designed to keep students in school and maintain progress toward graduation, while strengthening school safety. Requires local school systems to adopt policies that reduce long-term out-of-school suspensions and expulsions, and use such actions only when a student poses an imminent threat of serious harm to other students or staff, or when a student is engaged in chronic or extreme disruptive behavior. Expedites the student discipline appeal process by allowing local boards of education to hear and decide school discipline appeals with an opportunity to expend that time period in complex cases.
Lawful Absence (13A.08.01.03)	Lists the situations that are considered lawful absences, which includes suspension.
Student Attendance Policy (13A.08.01.05)	Requires local school systems to develop a student attendance policy which includes a statement for promoting school attendance and the rules, definitions, and procedures for policy implementation, including the provision for completing make-up work for lawful absences.

Pro-Social Approaches to Discipline

The key to school success and school completion, according to Dr. David Osher of the American Institute for Research (AIR) in his testimony to Congress, is “employing a three-tiered approach to social emotional learning, positive behavioral support, the support of student and family engagement, and addressing the students’ academic and mental health needs”.

(Congressional Testimony, February 27, 2013)

Traditional punitive disciplinary practices in schools have detrimental effects on school climate, student engagement, academic achievement, and students’ later life goals. Harsher discipline policies lead to pull-outs and suspensions that reduce instructional time for students, which can lead to academic failure, disengagement, and feelings of alienation from school.

Students dealing with these detrimental situations are at high risk for contact with the juvenile justice system (Fabelo et al., 2011) or leaving school. In addition, a Justice Policy Institute report (2011) found that relying on school resource officers and police officers to hold a traditional “security guard” role in schools may increase students’ likelihood of entering into the juvenile justice system due to minor infractions.

In general, schools often struggle with the following related to the implementation of disciplinary practices:

- Inconsistent application of punishment for the same violation;
- Lack of district-level and administrator-level support and involvement in policy development and reform; or
- Lack of professional development for staff and School Resource Officers (SROs).

These implementation challenges prevent the improvement of outcomes for students or of overall school culture and climate. Through the development of multi-tiered systems of support, and the application of policies, programs, and practices aimed at eliminating risks and increasing strengths, there is great potential to make changes in discipline strategies and outcomes that are supportive of the student, family, school staff, and the environment. The Guiding Principles of Effective School Discipline are listed below (Eber et al., 2009; Luiselli, Putnam, Handler, & Feinberg, 2005; Mirsky, 2011; Osher, Bear, Sprague, & Doyle, 2010; Voight, Austin, & Hansen, 2013).

- Promote success for all students.
- Create a culture where learning and safety are central.
- Practice elements of interventions and strategies consistently across all stakeholders in the school community.
- Require collegiality and consistency in the approach.
- Ensure respect and responsibility from all members of the school community.
- Nurture courtesy, cooperation, and accountability for actions.
- Teach appropriate student behavior.
- Enhance character development.
- Set high expectations for growth across the grades and as students mature.
- Follow a prevention-intervention model.
- Build partnerships with the greater school community.
- Make school climate and culture a priority as supported at the federal level.

A report issued by the U.S. Secret Service and the U.S. Department of Education after the Columbine High School shooting found that one of the best actions schools can take to reduce violence and bullying is to improve a school's climate and increase trust and communication between students and staff. Fortunately, evidence-based strategies which have been found to reduce bullying and other problem behaviors like drug abuse or poor attendance have been identified as "best practices" to address those specific behaviors while making students feel safer at school and improving academic performance. With technical assistance from the U.S. Department of Education, 19,000 schools have already put in place evidence-based strategies to improve school climate. These strategies involve certain steps for the whole school, such as consistent rules and rewards for good behavior.

Evidence-Based Practices

Evidence-based practices vary widely, but the following definition captures the essential elements of an evidence-based practice (EBP):

EBPs are those practices supported by rigorous scientific research, which are appropriate and effective for the population and setting in which the EBP will occur, and which feasibly can be flexibly implemented in that setting with fidelity. (Kendall & Beidas, 2007).

Determining the adequacy of the scientific research base of a proposed EBP is a challenge for educational decision-makers due to the time and expertise required to review original research. Several organizations provide consumer report-type reviews of published intervention programs, including those that directly relate to school discipline prevention and intervention practices. Some examples include:

- What Works Clearinghouse (WWC; www.whatworks.ed.gov);
- Office of Juvenile Justice and Delinquency Prevention Model Programs Guide (OJJDP Guide; www.ojjdp.gov/mpg/);
- Blueprints for Violence Prevention (OJJDP Blueprints; www.ncjrs.gov/pdffiles1/ojjdp/204274.pdf);
- National Center for Mental Health Promotion and Youth Violence Prevention (<http://www.promoteprevent.org/>); and
- Substance Abuse and Mental Health Services Administration National Registry of Evidence-Based Programs and Practices (SAMHSA Registry; www.nrepp.samhsa.gov/).

Since there are potential multiple barriers to implementing EBPs, it is critical to assess feasibility *prior* to choosing an EBP. The primary barrier to implementing an EBP in a school is whether the school has the resources required to implement the EBP. Typically necessary resources include staff and student time, staff expertise (knowledge and skills), and funds for purchasing recommended materials for staff training and support.

In addition to staff and student time, staff expertise is the other most common resource barrier to implementation. The implementation of a new EBP in a school typically requires either that: a) multiple staff members receive formal training in the EBP, or b) at least one staff member is trained and then is assigned the job of training others and acting as an ongoing consultant on implementing the EBP. A commitment to adequate staff training in the EBP is critical if the school's efforts are to be successful. Further, after the initial implementation year, new training is needed for newly hired staff, and booster training is often recommended for existing staff members to enhance continued implementation fidelity.

Finally, some EBPs require the purchase of materials from the publisher. Given that both staff training and purchase of materials require funds that are often in short supply, decision-makers may need to balance *relative* effectiveness of particular EBPs with cost considerations.

Implementation Science and School Discipline Stakeholders

As with any policy or procedure, it is important to consider the stakeholders that are affected. In the case of discipline matters, the stakeholders are numerous and invested in the outcome. School staff may have different viewpoints of the purpose and implementation of school discipline policies. Teachers and administrators often balance the needs of the whole with the needs of the individual. Parents are focused on the individual needs and rights of their child. While students may not fully understand the importance of being involved in the process, it is important to engage them at all levels.

Instructional Staff Responsibility

Teachers have an expectation that students will behave in a manner which is conducive to learning. Yet, teachers also have a responsibility to create positive learning environments and

present the instructional material in a manner which is designed to appeal to all students' learning styles. A well-managed classroom where academic expectations are held high and student participation in the academic setting is demonstrated will be a place where behavior problems are less likely to occur.

When behavior infractions are serious and reach a level where a referral to the administrator is needed, school building staff expects that consequences will be applied fairly, equitably and consistently. It is essential that the culture of the school ensures that everyone who commits a behavioral infraction is treated in the same manner, with the same level of consequence applied consistently.

Support Staff Responsibility

Those representing non-instructional positions within the school system's structure, share the responsibility to help design the student code of conduct and apply consequences equitably to the degree of infraction. These support personnel are often the ones who staff alternative placements and settings and therefore may have insight into the issues of students who disrupt the educational environment and infringe on the rights of other students to learn.

Administrator Responsibility

Administrators balance the needs of all stakeholders while providing for a safe learning environment. It is important for administrators to be open to the various viewpoints that may be present when managing discipline matters and concerns. In the end, a well-designed student code of conduct will help all parties fully understand the process.

Community Stakeholder Responsibility

Other school community members can also play an integral part in the implementation of discipline policies. With increasing concerns regarding school safety, many schools are employing school safety staff and school resource officers. In Maryland, School Resource Officers (SROs) are sworn officers of the law with full policing rights. School districts engage in memorandums of understanding with local law enforcement agencies to allow SROs to work in schools. A key issue in the use of safety staff and SRO's is clarifying roles and boundaries of

practice. It is important to note that unless there is a violation of law, the school administrator retains the responsibility for discipline in the school building.

Community resources can play a vital role in supporting schools and families to prevent violations of school discipline policy. Available support varies from community to community but generally the options to consider include agencies, universities, or individuals from the public, private, non-profit, or faith-based sectors.

Academic Achievement and Positive School Climates

The literature provides research on school climate and positive behavioral interventions and supports that maximize the impact of implementation of best practices and defines outcomes when implemented with fidelity. In addition, the linkage between conduct and academic performance and positive school climate and culture are demonstrated.

Student conduct and academic learning go hand-in-hand ([School Discipline and Academic Success: Related Parts of Maryland’s Education Reform](#); Maryland State Board of Education; July, 2012). Students cannot learn to the fullest extent of their potential if conduct problems are distracting both students and staff from focusing on academic goals (Jimerson et al., 2000). A safe, supportive classroom free of disruptions and aggressive behavior, however, allows for the most engaged learning environment possible. This type of educational experience can only occur when schools craft optimal conditions for learning (Osher, Poirier, Jarjoura, Brown, & Kendziora, 2013), also known as *positive school climate*. Just as planting a flower in fresh, fertilized soil, in a garden with proper sun exposure and lots of water creates the ideal conditions for magnificent blossoms, focusing on positive school climate creates an environment where student attendance, good behavior, and academic achievement can flourish (e.g., Hoagwood, Olin, Kerker, Kratochwill, Crowe, & Saka, 2007).

The Maryland Safe and Supportive Schools (MDS³), a federally-funded project, administered the MDS³ School Climate Survey in fifty-eight Maryland high schools (Figure 1). Grades earned—defined as “mostly A’s,” “mostly B’s,” etc. on the last report card—and risk behaviors were self-reported by 23,665 high school students in the spring of 2013. Figure 1 highlights the relationship between high school students’ risk behaviors and report card grades. While risk behaviors are associated with students across the academic spectrum, there is a clear

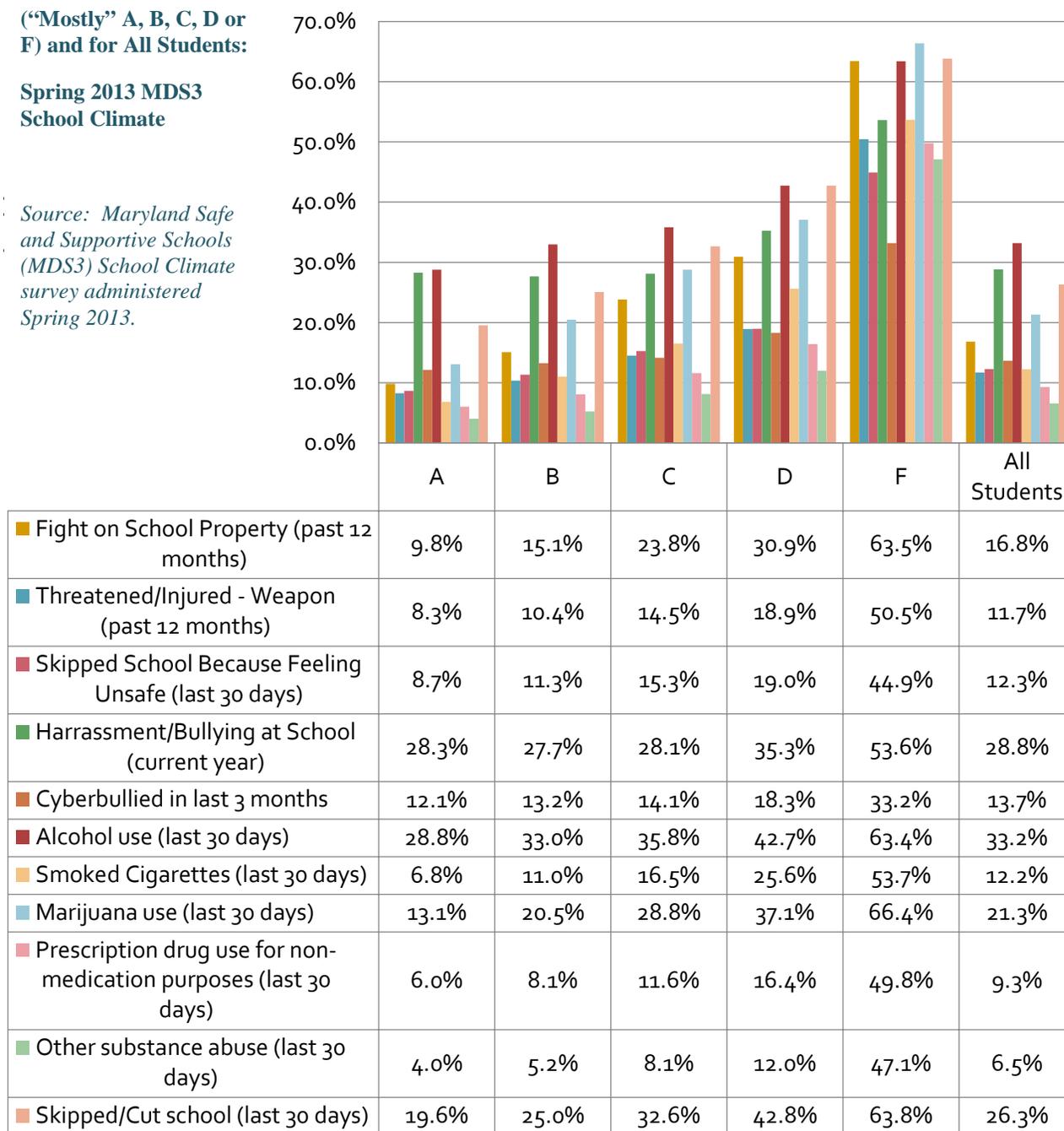
Figure 1

Risk Behaviors by Report Card Grade

(“Mostly” A, B, C, D or F) and for All Students:

Spring 2013 MDS3 School Climate

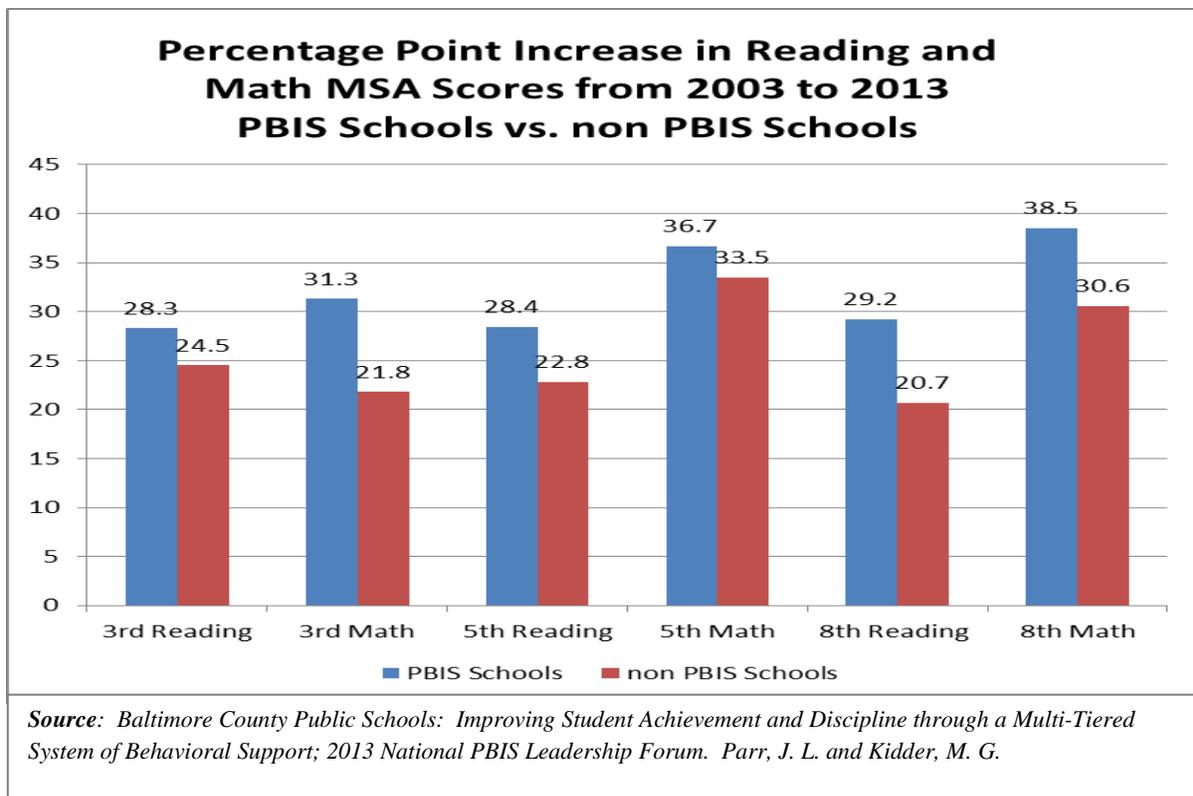
Source: Maryland Safe and Supportive Schools (MDS3) School Climate survey administered Spring 2013.



and steady rise in the percentages of students engaged in risk behaviors as grades decline. Academic information may be leveraged to determine which students are most in need of prevention/intervention services. Given the occurrence of risk behaviors across academic

categories, a case can also be made for certain services to be directed at the entire student body. Schools implementing Positive Behavior Interventions and Supports (PBIS) in Baltimore County Public Schools (BCPS) demonstrated greater improvements in reading and mathematics on Maryland’s State-wide Assessment, the Maryland Student Assessment (MSA), as compared to non-PBIS schools. Figure 2 shows a comparison of 2003 and 2013 achievement, which is defined as the percentage of students scoring in the proficient or advanced levels. Compared to their non-PBIS counterparts, the cluster of PBIS schools experienced larger percentage point increases in the proportion of students attaining proficient or advanced level scores. For example, on average, eighth grade mathematics MSA scores at the proficient or advanced levels rose by 38.5 percentage points for PBIS schools while non-PBIS schools showed a gain of 30.6 percentage points.

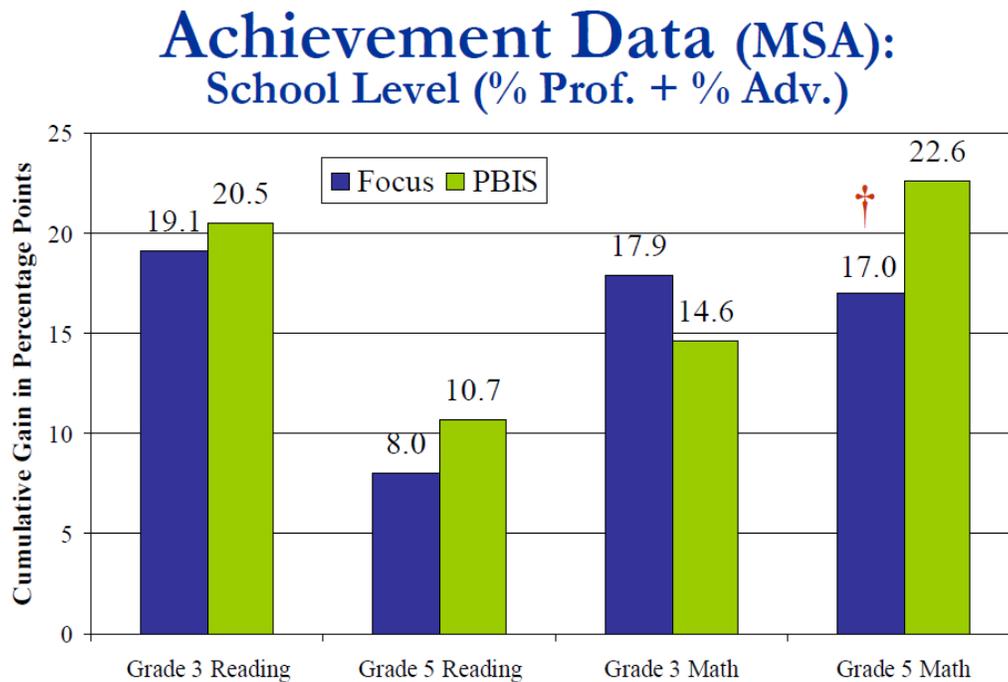
Figure 2



The results from the field have been validated by research using randomized controlled trials. Researchers (P. Leaf, PI; C. Bradshaw, Co-PI) from Johns Hopkins University School of

Public Health conducted a multi-year project that found an increasing trend in the percentage of students from PBIS schools scoring in advanced and proficient ranges of MSA tests (Figure 3).

Figure 3



Cumulative gain in improvement in MSA between Year 1 & 4. Baseline data not available. †T-test for Grade 5 math: $t = -1.67$, $df = 35$, $p = .105$.

Source: http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-prevention-and-early-intervention/Publications/Bradshaw_PBIS_prevention_talk.7.2.08.pdf.

Office referrals result in lost instructional time. An estimated twenty minutes of instructional time is lost with each office discipline referral (ODR) and a full day of instructional time with each suspension. The gains in instructional time garnered through multi-tiered school-wide approaches are substantial. For example, if one office referral is equal to twenty minutes of student instructional time lost, and fifteen minutes of administrator time, then a cost-benefit analysis can be made in an example where office referrals across twelve schools are 5,600 fewer than the previous year. Table 3 shows how these figures translate into 14.6 administrator days and 19.5 days student instructional days *per school*, as an average across twelve schools.

Table 3

Cost/Benefit Worksheet			
Administrative Time for Office Referrals		Instructional Time Lost for Students	
Total Minutes 5,606 x 15 =	84,090 minutes	Total Minutes 5606 x 20 =	112,120 minutes
Total Hours Divided by 60 minutes =	1401 hours	Total Hours Divided by 60 minutes =	1868 hours
Total Days Divided by 8 hours =	175 days of administrator time	Total Days Divided by 8 hours =	234 days of student instruction
Average Days/School Divided by 12 schools=	14.6 days of administrator time	Average Days/School Divided by 12 schools=	19.5 days of student instruction
<i>Source: OSEP Technical Assistance Center for Positive Behavioral Interventions and Support</i>			

Recommendations: Research

- Utilize the policies in place both federally and at a state level to frame the development of local discipline policies.
- Develop local policies that are rooted in data-based decision-making to guide staff and administrators in disciplinary practices and systems.
- Develop discipline policies that promote an educational learning approach rather than a punitive approach.
- Communicate the policies to all stakeholders prior to discipline events arising
- Engage all stakeholders before, during, and after a discipline event.

Best Practices that Support Pro-Social Behaviors

The previous tables demonstrate that problem behaviors and a disruptive school climate interfere with academic progress while students in positive climates perform better on standardized assessments. Multi-tiered school-wide approaches change factors that are associated with greater academic achievement, such as higher attendance rates and reduced suspensions. As school behaviors improve, educators are able to spend more time on teaching and learning and less time on disciplinary infractions.

A student is in school to gain mastery over core content and to receive instruction that will enhance life-long learning. A pro-social approach to school discipline creates opportunities for students to develop social-emotional skills and prepare them to interact with the world around them as well as maximize every student’s likelihood of academic success. Discipline data, such

as suspensions, need to be viewed alongside student achievement data. Viewing student discipline through the lens of teaching and learning is a critical philosophical approach. Administrators and teachers are educators first – teaching and learning are their areas of expertise. The best practices described in this report illustrate the connectedness between academics and pro-social practices.

Practice: Multi-Tiered Systems of Support

Multi-tiered systems of support (MTSS) is the umbrella framework utilized to define several important initiatives in early childhood, education, mental health, health and public health. Multi-tiered systems of support within schools, such as School-wide Positive Behavioral Supports (often referred to as SWPBS or SWPBIS, where the “I” stands for Interventions) involves a systems approach to improving student behavior and making the school environment more conducive to learning. Such systems operate on three levels: Tier I, or the universal level for the entire school and most students; Tier II, or the targeted level to support groups of students with specific shared behaviors; and Tier III, the intensive level for students who have serious behavioral problems requiring individualized services and supports.

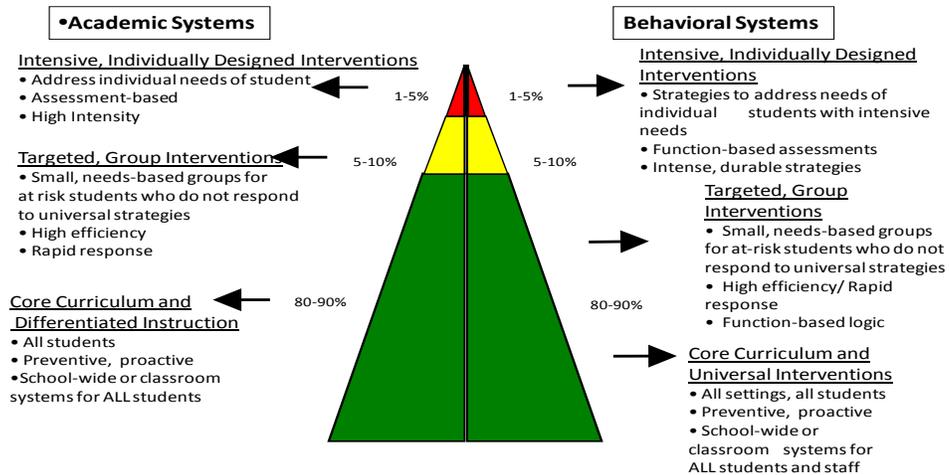
The chronology leading to this comprehensive integrated model began in 1968 with the foundation of Applied Behavioral Analysis (ABA). Later in 1974, the public health three-tiered model was published (Kaplan) and in 1997 the National TA Center for PBIS and the Association of Positive Behavioral Supports were launched, bringing research and practice to the field. In addition, in the 1990’s Response to Intervention (RTI) was introduced and the National Implementation Research Network (NIRN) was developed. These events have all contributed to the rich research and practice that has brought the field to the current language “multi-tiered systems of support (MTSS)” as the overarching implementation framework. Figure 4 captures the different language used to describe the multi-tiered systems of support framework and its tiers; with the definitions of each tier remaining quite consistent.

Figure 4

Multi-Tiered Systems of Support

Public Health Prevention Model, Three Tiered Prevention Model, PBIS Framework, the Triangle, Response to Intervention (RTI), SEFEL Framework

Maryland's Tiered Instructional and Positive Behavioral Interventions and Supports (PBIS) Framework



Tier I, Primary, Universal, School-wide, Green Zone. Tier I strategies/interventions are designed for *all* students in the building. Tier I, primary prevention level of service provision consists of school-wide and classroom systems of support, implemented by all school staff and referral structures. Typically, 80%-85% of the student population responds to Tier I strategies. One data source to select and progress monitor *behavioral* interventions is Office Discipline Referrals (ODRs). On average, students responding to Tier I supports receive 0-1 ODRs in a school year.

Tier II, Secondary, Selected, Supplemental, Yellow Zone. Tier II strategies/interventions are designed for *some* students in the building. This level of service provision is for students requiring additional supports, often implemented by select staff based on the relationship with the student. Tier II services are added to, and therefore augment, Tier I services. They are not implemented as stand-alone supports. Typically 10-15% of students require some additional secondary supports. On average, students requiring Tier II supports receive 2-6 ODR's in one school year.

Tier III, Tertiary, Intensive/Targeted, Red Zone. Tier III strategies/interventions are designed for one student or a few students in the building who need individualized interventions. Tier III services are put in place for students for whom previous interventions have been unsuccessful; implemented by select staff. As with Tier II, intensive individualized support augments, rather than replaces, Tier I and II support. Typically students with chronic, severe and challenging behavior may require Tier III support for 1-5 % of the student population. Students in need of Tier III interventions exhibit behaviors that result in 6 or more ODR's in one school year.

Practice: Response to Intervention

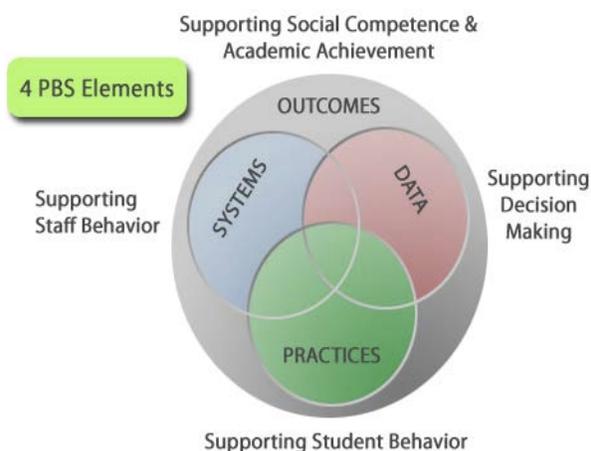
Response to Intervention (RTI) is the “the practice of providing high-quality instruction and interventions matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals, and applying child response data to important educational decisions” (Batsche et al., 2005). Based on a problem-solving model, the RTI approach considers environmental factors as they might apply to an individual student’s difficulty, and provides services/intervention as soon as the student demonstrates a need. Focused primarily on addressing academic problems, RTI has emerged as the new way to think about both disability identification and early intervention assistance for the “most vulnerable, academically unresponsive children” in schools and school districts (Fuchs & Deshler, 2007, p. 131.) For more information please refer to:

http://www.marylandpublicschools.org/NR/rdonlyres/FCB60C1D-6CC2-4270-BDAA-153D67247324/17125/Tiered_Instructional_ApproachRtI_June2008.pdf

Practice: Positive Behavioral Interventions and Supports

Positive Behavioral Interventions and Supports (PBIS) is a decision-making framework that guides the selection, integration, and implementation of evidence-based academic and behavioral practices for improving outcomes for all students. It is a three-tiered prevention model which follows the public health approach to prevention (Kaplan, 1974) by providing more intensive supports for students not responding sufficiently to a universal system of support.

Figure 5



These four elements are guided by six important principles:

1. Develop a continuum of scientifically based behavior and academic interventions and supports.
2. Use data to make decisions and solve problems.
3. Arrange the environment to prevent the development and occurrence of problem behavior.
4. Teach and encourage pro-social skills and behaviors.
5. Implement evidence-based behavioral practices with fidelity and accountability.

Figure 5 describes the four elements and the principles by which they are guided to support social competence and academic achievement using PBIS. Data, systems and practices must be in place in order to achieve agreed upon outcomes for students and staff.

Maryland was a very early implementer of school-wide, universal PBIS and has since developed the infrastructure to scale-up evidence-based practices that target behavioral and mental health problems in schools. This effort is possible through collaboration between the MSDE, Sheppard Pratt Health System (SPHS) a non-profit behavioral health provider, and Johns Hopkins University's (JHU) Center for the Prevention of Youth Violence. This partnership, known as PBIS Maryland, involves multiple stakeholders, including educators, practitioners, and researchers. PBIS Maryland is guided by a three-tiered educational and public health approach to prevention (PBIS; Horner et al. 2005; Sugai and Horner 2002, 2006; Walker et al. 1996).

The National Technical Assistance (TA) Center on Positive Behavioral Interventions and Support has assisted efforts in Maryland since 1999. The TA Center is currently in its third 5-year funding cycle with the Office of Special Education Program (OSEP). With the TA Center's guidance and support, PBIS Maryland has created the capacity at the state and local levels to support the training, coaching and tracking of School-wide PBIS implementation. As of the summer of 2013, PBIS Maryland celebrates fourteen years of state-wide training and implementation in school-wide PBIS; training 965 public, alternative, and non-public schools across all twenty-four local school systems in Maryland. Nationally there are over 19,000 schools in forty-four states implementing universal, school-wide PBIS.

MSDE placed the responsibility for implementation of PBIS in the Division of Student, Family and School Support (DOSFSS) in keeping with its focus on prevention. The Division provides state-level oversight and resources to local student services personnel who in turn support school PBIS teams by serving as coaches, team leaders, or members.

Positive Behavioral Interventions and Supports provides systems for schools to design, implement, and evaluate effective school-wide, classroom, non-classroom, and student-specific discipline plans. When implemented with fidelity, universal PBIS aims to reduce disruptive behavior, enhance school climate and create safer, more effective schools for *all* students. This is accomplished through applying teaching and learning practices to the prevention and the

promotion of positive behavior. This shift away from reactive, punitive responses is accomplished through collection and analysis of pertinent school data, teaching clear behavioral expectations for students, and establishing systemic procedures and protocols that support desired staff behaviors.

Positive Behavioral Interventions and Supports is effective because it emphasizes professional development, contextual fit for implementing schools, transparent discipline policies, and data-based decision-making at all levels of the school system. It also establishes a safe overall school climate and minimizes disciplinary actions' intrusion on classroom time (i.e., Sugai & Horner, 2002).

Both RTI and PBIS are grounded in differentiated instruction as required in COMAR's Universal Design for Learning (UDL). Each approach delimits critical factors and components to be in place at the universal (Tier I), targeted group (Tier II), and individual (Tier III) levels. The goal is to describe the shared characteristics of these approaches as a basis for highlighting how best to meet the needs of children experiencing academic and social difficulties in school (PBIS Newsletter, June 2007). These systemic frameworks all ensure that conditions for learning are improved so that students will stay in school to work towards meeting Maryland's College and Career Ready Standards.

Practice: Maryland Safe and Supportive Schools (MDS³)

Maryland's role as an early implementer of PBIS nationally, and the ongoing research that has come out of Johns Hopkins University about that implementation, favorably positioned MSDE to apply for the Safe and Supportive Schools (MDS³) grant from the U.S. Department of Education's Office of Safe and Healthy Students (OSHS). One of eleven (out of thirty-three) states receiving funding, Maryland received \$13.2 million over four years to implement the Maryland Safe and Supportive Schools (MDS³) Initiative.

The model includes roles for each of the partners in PBIS Maryland (MSDE, SPHS and JHU) as it integrates all of the lessons learned in the areas of training, program implementation, research and evaluation, capacity building, marketing, engaging stakeholders, and leading a state-wide education effort. The MDS³ grant was designed to strengthen and build upon Tier I strategies in order to strategically add Tier II and Tier III strategies in all schools in the

intervention condition. MDS³ is founded in implementation science with reliance on data collection and analysis, training, and coaching to fidelity of implementation of evidence-based practices.

The MDS³ initiative serves as a “pilot” for creating a multi-tiered system of supports for all Maryland schools, but has particular relevance for high schools. The U.S. Department of Education (USED) identified high schools as the targeted population and required development of a survey instrument to measure safety/climate, student engagement and student environment. Maryland provides a posting of “school climate/safety scores” on its website which is used by the targeted schools for comparative analysis from one year to the next.

In addition to the funding of eleven states, USED funded the American Institutes for Research (AIR) as the national technical assistance center for Safe and Supportive Schools (MDS³), known as the National Center for Safe and Supportive Learning Environments (NCSSLE) (<http://safesupportivelearning.ed.gov/>). The center provides ongoing support for implementation of the S³ Initiative across the country.

Practice: Continuum of Progressive Discipline

Progressive discipline supports a positive school climate and ensures that everyone; parents, students, staff and community members, feels they are welcome and respected. Effective school discipline employs positive, preventative and productive practices to teach students to behave and interact in a responsible manner, and to be responsible for their actions. The progressive discipline approach to making schools safer involves the whole school with emphasis on: promoting positive student behavior, preventing inappropriate behavior, providing early and ongoing intervention by addressing inappropriate behavior with appropriate consequences.

One strategy for understanding those behaviors, is to use what is termed “Function-Based Thinking”, which is based on the formal Functional Behavioral Assessment (FBA) used to evaluate the behaviors of students with disabilities. (Hershfeldt, P. Rosenberg, M., Bradshaw, C., 2010). The document in its entirety is found in the Companion Document to the Report on Best Practices in School Discipline. These priorities can be implemented within the multi-tiered systems of support framework and are consistent with those of PBIS and MDS³.

Understanding challenging behaviors as “teachable moments” is fundamental to a positive approach to discipline. Progressive discipline uses incremental interventions to address inappropriate behavior with the ultimate goal of teaching pro-social behavior. Progressive discipline does not seek punishment. Instead, progressive discipline seeks concurrent accountability and behavioral change. It is an approach that promotes positive student behavior and enables the administrator to choose the appropriate consequences to address inappropriate student behavior. Principals should consult the code of conduct when determining which disciplinary response to use. In determining how to best address inappropriate conduct, it is necessary to evaluate the totality of the circumstances surrounding the conduct. The following facts must be considered prior to determining the appropriate interventions or disciplinary actions:

- Student’s age and maturity;
- Nature, severity and scope of the behavior;
- Circumstances/context in which the conduct occurred;
- If applicable to student; Individualized Education Program (IEP), Behavioral Intervention Plan (BIP), and/or 504 Accommodation Plan;
- Risk or danger to himself/herself or to others by continuing to be in school;
- Other things happening at that time in his or her life; and
- Bullying or harassing behavior of others.

The goal is to prevent a recurrence of negative behavior by helping students learn from their mistakes. In practice, every reasonable effort should be made to correct student misbehavior through interventions and other school-based resources and the least severe disciplinary responses. Schools are expected to actively engage parents in the progressive discipline approach.

Practice: Restorative Practices

Restorative practices (RP) comprise a philosophy and an approach steeped in the core belief that relationships and accountability matter, and that each person should be treated with dignity and respect. Restorative practices are not a “program”, a code of conduct, nor a way to offer students “a free ride” to avoid consequences for inappropriate or hurtful behavior. Instead, they provide ways for everyone in the school community (administrators, teachers, staff,

students, families, etc.) to build safe, supportive, and effective learning environments through respect, accountability, and relationships. Restorative practices offer everyone in the school an opportunity to support learning through respectful and supportive interactions. They offer an inclusive and fair process through which to manage harmful behaviors. The bottom line for schools who have successfully adopted restorative practices is that RP results in increased instructional time and more engaged and supportive learning environments.

Restorative practices are a powerful complement to a multi-tiered system of support, offering “scaffolding” for positive learning environments through its approach, values, tools and fidelity measures. Restorative practices help fill in the “bricks” of the framework, providing tools for creating an engaged and safe school climate, and for effective relationships and conflict management. Some of the tools associated with RP, including dialogue circles (e.g. class meetings), peer and truancy mediation, restorative circles, and community conferencing provide a structure for students and adults to learn positive behaviors, respond to harmful behaviors in inclusive ways that allow everyone to learn from their mistakes, and to build a sense of connection, caring, and community in the process. Many schools using these practices are finding a positive shift over time in the classroom, and a reduction in office referrals and out-of-school suspensions (e.g., Schiff, 2013).

Practice: Universal Design for Learning

Universal Design for Learning (UDL) began as a project of the National Center on Accessing the General Curriculum (NCAC), a cooperative agreement between the Center for Applied Special Technology (CAST) and the U.S. Department of Education, Office of Special Education Programs (OSEP). UDL is based on neuroscience that reveals individuals learn in different ways. The UDL approach is characterized by a flexible curriculum—designed at the appropriate developmental stage—for all students as opposed to teachers having to continually design multiple lesson plans that adjust instruction in response to individual students.

In July 2012, MSDE adopted the UDL regulations; COMAR 12A.03.06, which promotes the application of UDL principles to maximize learning opportunities for all students. The UDL regulations provide for integration of UDL guidelines and principles into the development and provision of curriculum, instructional materials, instruction, professional development, and

student assessment. These regulations have a direct link to behavior and discipline of students in schools.

UDL is based on three primary principles:

1. Multiple means of representation for learners, allowing options for acquiring information and knowledge,
2. Multiple means of action and expression, allowing options for demonstrating what students know,
3. Multiple means of engagement, allowing for students' interests, offering challenges, and increasing motivation. (MSDE, 2011)

The three main tenets of UDL are multiple means of representation, action and expression, and engagement. Many of the principles of UDL can be readily adopted for little or no cost. Although advancements in educational technology are invaluable to increasing students' engagement and access to curriculum, there are powerful ways to implement UDL principles without technology that will greatly impact student behavioral choices and academic achievement.

Practice: Social Emotional Foundations for Early Learning (SEFEL)

Social skills in young children are more closely associated with school readiness and success in kindergarten and first grade than cognitive and academic skills (Raver & Knitzer, 2002; Smith, 2004). Nationally, early care and education providers report that challenging behavior and social skills problems are their greatest challenges; and programs report expelling preschoolers at a rate three times that for school age children (Gilliam, 2005; Hemmeter et. al, 2007). Grounded in the public health approach of promotion, prevention and intervention, the Social Emotional Foundations for Early Learning (SEFEL) social framework allows all children to be supported through appropriate supports and services. Universal, targeted, and intensive interventions are provided along a continuum based on need. This also requires that there is a focus on creating a supportive and responsive environment.

(<https://theinstitute.umaryland.edu/SEFEL>)

The Pyramid Model for Supporting Social and Emotional Competence (Fox et al, 2003; Hemmeter, Ostrosky, & Fox, 2006), is a conceptual framework of evidence-based practices for

children birth through five and their caregivers that was developed by two national, federally-funded research and training centers. The model is supported by extensive training materials, videos and print resources. In Maryland, SEFEL is being implemented in a variety of early childhood settings, including early care and education and elementary schools, through a multi-agency, intra-divisional effort led by MSDE. The Institute for Innovation and Implementation at the University of Maryland is creating an outcomes and fidelity monitoring system for Maryland SEFEL. The project builds upon the Early Childhood Mental Health Consultation Model's Monitoring System.

Practice: Plan, Do, Study, Act Cycle (PDSA)

The Plan, Do, Study, Act (PDSA) cycle is applicable to any field. When applied to discipline, the administrator as the leader of the school is crucial in determining how and when such quality improvement is applied through data-based decision-making. It is critical to organize and disaggregate the data for regular review by the building principals and executive officers (those that supervise principals). It is also critical to use a data monitoring approach at the system level which provides a comparative view of schools in relationship to established system targets. The data should include the number of overall suspensions, number and types of suspensions, and should be broken down by demographic group. Such a systemic approach will model data analysis and related conversations for individual schools, as well as assist in supervisory conversations and strategy development..

The PDSA approach should be a common denominator to solving issues, improving student behavior, and developing the best professional approaches. This is important for the school improvement process and the handling of individual disciplinary situations. This approach puts value on creating a positive learning environment rather than a strictly punitive one. Such a learning environment values continuous learning and resolution of disciplinary issues for the student and for the adults so that all may move forward. The PDSA cycle can be utilized to increase student achievement by using carefully selected research-based prevention strategies and intervention programs to increase expected student behavior, decrease suspensions, and raise overall student achievement. School systems may define "cycles" as marking periods, quarters, semesters, or years. Quality control is the responsibility of the school's "Implementation Team",

a group of four or five teachers and administrators responsible for oversight of the PDSA process.

The “doing” part of the cycle addresses how the plan will be carried out. It specifies how professional development and adult learning will occur. The “study” component addresses reflection on the data to show whether the plan did what it was intended to do—namely reduce suspensions and increase student achievement. During the “study” phase, the implementation team changes the plan as needed after each cycle to increase the desired results. It could be a minor tweak or a major overhaul based on how close or far the results are from the target.

The implementation team determines the appropriate action needed before the next cycle. Often the appropriate action will be ongoing professional development at the district and school levels. The PDSA cycle continues with ongoing adjustments, as needed, to ensure the plan’s goals are being met.

Practice: School Resource Officers (SRO)

School resource officer (SRO) programs have become important tools in creating safe and supportive school climates. The National Triad Model is recognized and adopted as a “best practice” by most Maryland jurisdictions as pro-social and preventative in nature. The exception is the Baltimore City Schools Police, who ‘generally’ police the schools and act in the capacity of the instructor or mentor/counselor a portion of their time. The National Triad Model defines three major roles of the SRO; an instructor who teaches law related topics in the classroom, a student mentor/advisor/counselor to help resolve conflicts without violence, and an officer of the peace to serve and protect. Effective SROs are adept at community policing skills such as communication, relationship building, identification of stakeholders, problem-solving, cultural competence, and youth culture.

In the 2010 session of the Maryland State Legislature, a law was passed requiring the Maryland Police Training Commission, in consultation with the MSDE, to develop a cultural competency model training curriculum for law enforcement officers assigned to public schools and encouraging officers assigned to public schools to complete the cultural competency model training before beginning an assignment in a public school (Education article 7-430). The model training curriculum was to teach behaviors, attitudes and polices that enable law enforcement

officers to understand, communicate with, and effectively interact with the individuals, organizations and institutions in the community in which the officer's assigned school is located. This includes having knowledge of the services available to help prevent juvenile arrests. This model curriculum was presented and distributed for dissemination through a train-the-trainer model to state representatives at a meeting in the fall of 2012 by the Maryland Police Training Commission staff.

Recommendations: Best Practice

- Focus on school-wide prevention and early intervention through multi-tiered systems of support in order to maximize school-wide performance and to minimize the need for intensive interventions.
- Establish standards of leadership to: ensure staff buy-in, clearly define measurable goals and expectations for students and staff, develop and implement curriculum to teach those expectations, and lastly, devote resources to relevant interventions chosen through data-based decision rules.
- Transform punitive practices to pro-social supportive behaviors that reinforce desirable behaviors and outcomes.
- Assess the purpose or function of disruptive behaviors prior to implementing an intervention.
- Utilize a real-time data system to track effectiveness of interventions and monitor the need for additional supports (for both students and staff).
- Select evidence-based practices from the What Works Clearing House or other such lists sanctioned by the federal government; considering match for intensity of intervention needed and contextual fit.
- Institute policy to make removal of students from the classroom a last resort after documented appropriate interventions have been exhausted.
- Oversee fidelity of implementation and intervention results to determine the adequacy and effectiveness of systems in place.
- Network with interdisciplinary and interagency partners to maximize efficient use of funds and other resources.

Professional Development

Current Professional Development Practice

Maryland's current practice has strength in that our schools already have infrastructure through teams that support discipline reform; such as school improvement, student services, and PBIS teams. Although the infrastructure is in place, not all of systems are operating at a highly effective level, or are aligned with the goals of discipline reform. Student services teams, for example, may focus the majority of their energy addressing student attendance issues. While attendance is important, this multi-disciplinary team of professionals is best suited for developing individualized interventions for at-risk students. Likewise, school improvement teams need to ensure that they are following the PDSA cycle related to positive discipline procedures.

Opportunities exist at the pre-service level in creating specialty areas in colleges and universities that focus on positive discipline practices, much like specialized programs exist to train teachers in philosophy, assessment, and technology. Arguably, expertise in positive discipline practices, and thus reduced suspensions, may have a more dramatic influence than many other existing specialty areas. At the school level, implementation teams may be developed, or implementation responsibilities could be assigned to existing teams, like the school improvement team. There are also many opportunities to identify model schools whose positive discipline practices are aligned with discipline reform goals; reducing suspensions and increasing student achievement. In turn, colleges and universities may then make these schools premier sites for pre-service teachers to complete their internships to ensure strong role models.

The biggest threat to pre-service training in the discipline arena is finding professors and instructors who are proficient at implementing the strategies and practices. If the instructor doesn't have firsthand experience implementing these programs, then they will have less credibility among their students. A major threat within the school systems is convincing teachers that discipline reform is not just "this year's new best thing." This mentality increases the likelihood that the ideas will be dismissed without being effectively implemented at the classroom level, where it matters most. Another challenge will be to work with the appropriate unions to ensure that accountability measures that affect teacher evaluations are addressed

through negotiated agreements. One of the major barriers to effective discipline reform is anxiety and fear. Administrators fear that fewer suspensions will result in more disruptions in schools. Teachers fear that they will be expected to deal with disruptive students without the office referral process on which they have come to rely.

Behavioral Expectations: Shifting from Suspension to Intervention

The shift from a suspension model to an intervention model requires teachers and administrators to think differently about how they manage the classroom, deliver instruction, and interact with students. Pre-service expert Harry Wong discourages the use of terms that have developed negative connotations among educators like “behavior management” and “classroom management.” Instead, Wong focuses on the goal of increasing behavioral expectations by helping teachers develop positive procedures and routines that promote learning. Inspiring students to meet behavior expectations is not accomplished by the punitive discipline model that too often results in unnecessary office referrals and suspensions. (Harry K. Wong and Rosemary T. Wong, 2009)

Wong maintains that effective instruction is more than just assigning activities and then punishing students who distract others from completing the assignment. Effective teachers know that all learning is behavioral. It is just as important to learn the classroom procedures for entering and exiting the classroom as it is to learn the lesson’s objectives. Teaching requires active involvement between the teacher as a role model who reinforces appropriate behavior and redirects inappropriate behavior. A critical element to this approach is the positive relationship between the teacher and students. Effective teachers personally greet students at the door, assess students’ attitudes and behavior while they enter the classroom, establish rapport, and guide students to begin working according to established class routines. Teachers who begin class seated behind a desk by checking attendance in a roll book have missed critical opportunities to make personal connections and set the tone for a positive learning environment.

Traditional Pre-Service Training

Teachers and administrators receive training in traditional and non-traditional settings. Traditional settings include pre-service training in colleges and universities, leading to education degrees and certificated employment in public, non-public, and private schools. Non-traditional

settings include organizations that recruit and train “high-achieving” college graduates, usually without education degrees, to teach in low-income communities. The largest such nationwide organization is Teach For America, but there are also many regional programs throughout the country including New York City Teaching Fellows, Chicago Urban Program, and Mississippi Teacher Corps.

Non-Traditional Pre-Service Training

Non-traditional teachers, like those in Teach For America schools, get the majority of their experience “on-the-job.” These teachers learn as they go with curriculum designed by the sponsoring organization, usually including a combination of classroom learning, online instruction, and consultation with more experienced teachers. The concentrated pre-service training in these non-traditional settings is the inverse of that provided by colleges and universities. While colleges provide comprehensive content knowledge with less discipline training, non-traditional settings recruit people who already have content expertise, or are capable of mastering the curriculum content in advance to stay ahead of the students. Instead of mastering course content to “teach the curriculum,” non-traditional teachers become proficient at the social aspects of education to “teach the student.” Their pre-service training emphasizes interpersonal relationships, rapport building, cultural proficiency, positive behavioral systems, and motivation strategies.

Administrator Preparation

Administrator preparation occurs in both the traditional and non-traditional settings. Many teachers in the traditional settings earn their administrative credentials through graduate schools. Administrators in Teach For America and similar programs earn their certifications while teaching and attending program-specific courses.

Research shows that education reform can be either enhanced or inhibited by the school administrators, so it is imperative that our administrator training programs promote the attitudes and skills associated with positive discipline and understanding of the negative impact that suspension has on school success.

College/ University Preparation

The current practice for teacher and administrator professional development includes pre-service and graduate training at colleges and universities, in-service training by district leadership teams and school leadership teams, and on-the-job training within organizations like Teach For America.

Pre-service training in Maryland is provided by colleges and universities, some with general education programs and some with specialty areas. Most of these programs share a similar scope and sequence of preparing teachers with respect to student behavior and discipline. Within the first two years, undergraduates become familiar with basic terms, concepts, and theories in their introductory courses. Advanced methods courses include more practical application such as developing and communicating classroom rules and consequences for violating those rules. Experience is gained during short-term internships where student teachers shadow and follow lead or mentor teachers. The pre-service experience usually culminates with an internship where college students teach for a semester or more under the supervision of a veteran teacher.

The Maryland Higher Education Commission (MHEC) lists thirty colleges and universities in Maryland that offer traditional education courses in specialty areas that include: multi-cultural education, curriculum and instruction, educational leadership, education administration, urban education and leadership, superintendence, media design, assessment, philosophy, special education, gifted and talented, early childhood, counselor education, elementary education, art, business, language arts/English, health, technology, mathematics, music, physical education, reading, science, social science, chemistry, physics, and world languages.

Because traditional teacher and administrator preparation has historically emphasized mastery of subject content, none of the specialty areas are dedicated to student discipline and positive behavioral practices. According to Dr. Mary Ellen Lewis, Johns Hopkins University professor, special education courses provide the most preparation in behavior and discipline. This extra training manifests in a pervasive culture in our schools in which special educators assume the disciplinarian role so general educators can continue teaching without distraction.

For sustained and effective discipline reform to take place, this paradigm must change so that all educators, not just special educators, have the skills and attitudes to positively influence student behavior. More comprehensive pre-service training in positive discipline practice within our colleges and universities will be important to this change.

Model Programs

Some potential model programs focusing on discipline include private vendors who provide research-based programs to school staff interested in learning more about related topics such as relationship building. For example, Capturing Kids Hearts (CKH), Kennedy Krieger Institute (KKI) and Crisis Prevention Institute (CPI) are private vendors who can provide research-based professional development programs on relationship building for teachers and other school staff. Other model school climate programs may provide useful information and data to support their interventions and strategies. One such model is the Children’s Resilience Initiative in Lincoln High School in Walla Walla, Washington. This alternative high school has reduced suspension by eighty-five (85) percent by acknowledging and responding to adverse childhood experiences (ACES). “The Lincoln High School staff embraced two basic concepts: toxic stress prevents kids from learning, and moving from a punitive approach to a supportive education approach changes behavior.” (ACES Too High News, Stevens 2012)

While these existing programs provide a useful starting point for choosing programs to move forward in discipline reform, pending changes to discipline regulations have primed educators for coming changes. These educators, now primed to expect some discipline reform, have time to adapt to and prepare for such changes – including determining what forms of professional development may be most appropriate for their schools and staff.

Local School System Professional Development

Local school systems frequently adopt a “train-the-trainer” model in which the administrative leaders receive training from contracted experts and then provide that training to their school staff during designated professional development days. Major initiatives are usually addressed over the summer then reinforced with the brief training periods throughout the year. A challenge to this trickle-down approach is that it is too often dismissed by teachers as, “this year’s new best thing,” and little, if any, of the effects make it into the classroom.

At the school level, professional learning communities (PLCs) are led by the principal, who may share this responsibility with a team of educators. The time for training includes the summer block of days before students arrive, regular staff meetings, embedded professional development, and mentoring from master teachers and department supervisors. Teachers needing assistance may make use of graduate programs, visits to model schools, professional conferences, online courses, and mentoring. The PLC model of professional development incorporates all of the critical components for successful training outcomes; presentation, demonstration, practice and coaching. Table 4 demonstrates that all three components render the best training outcomes, which guides the training models in place for multi-tiered systems of support in Maryland.

Table 4

Training Outcomes Related to Training Components			
	Training Outcomes		
Training Components	Knowledge of Content	Skill Implementation	Classroom Application
<i>Presentation/ Lecture</i>	10%	5%	0%
<i>Plus Demonstration</i>	30%	20%	0%
<i>Plus Practice</i>	60%	60%	5%
<i>Plus Coaching/ Admin Support Data Feedback</i>	95%	95%	95%

Joyce & Showers, 2002

Recommendations: Professional Development

In accordance with the review, professional development strategies are recommended in three areas; relationship building, resources and training, and implementation teams.

- Incorporate evidence-based strategies that specifically address relationship building.
- Consider utilizing the validated School Climate Survey data on Student Engagement, School Safety and School Environment that has been developed through the Maryland Safe and Supportive Schools to measure progress in relationship building.

- Work with the Division of Certification and Accreditation and institutes of higher education to consider adding the requirement of a course in behavior management as part of teacher certification in Maryland.
- Work with the Division of Certification and Accreditation and institutes of higher education to provide a selective certification track for a “Behavior Specialist” with appropriate multi-tiered coursework.
- Publicize Maryland resources for response to behavioral crisis such as provided by Crisis Prevention Institute (CPI).
- Work with the Directors of Student Services to develop and provide training for school administrators to change the preferred response to a discipline referral from punishment to providing student supports.
- Support a selective certification track for Maryland School Resource Officers with appropriate multi-tiered coursework. Applicants for SRO Certification should be seasoned patrol officers who work well with little supervision and are highly productive; have low sick leave usage; and are highly ethical and moral individuals. Courses should be progressive and ongoing with an extensive basic SRO course as the foundation along with an annual re-certification course. Supplemental coursework would provide additional certification levels for advance policing in schools, supervising police in schools, and a school resource officer instructor level.
- Recognize the leadership capacity of the student support team (SST), PBIS team and other existing teaming structures to reduce out-of-school suspension and consider the revision of current office referral systems.
- Require building leadership to set annual school climate goals and establish accountability measures to ensure goals are met.
- Make the establishment of school climate implementation teams such as PBIS and SEFEL, a priority. Consider elevating the importance of a positive climate by requiring schools to provide a climate status report to their local school board of education at least annually, if not quarterly.
- Work with institutes of higher education to create a rubric for selecting supervising mentors for student teachers and novice teachers. Include classroom coaching and goal setting for behavior and discipline.
- Set aside a portion of the school budget to support implementation of a positive school climate. NIRN research recommends a fifteen percent set-aside to support implementation.

Conclusion

On January 28, 2014, the Board adopted new regulations guiding student discipline. The regulations are designed to keep students in school and maintain progress toward graduation, while strengthening school safety. Local boards of education will be required to update their student discipline policies based on the new regulations by the beginning of the 2014-15 school year.

This report and the recommendations therein align with the regulations and are respectfully submitted to advance the Board's ground-breaking work around student discipline.

Appendix A: Workgroup Members

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Appendix B: Acronyms

ACES	Adverse Childhood Experiences
AIR	American Institute for Research
APA	Applied Behavioral Analysis
BCPS	Baltimore County Public Schools
BIP	Behavioral Intervention Plan
CAST	Center for Applied Special Technology
CKH	Capturing Kids Hearts
COMAR	Code of Maryland Regulations
CPI	Crisis Prevention Institute
CYJ	Center on Youth Justice
DOSE/EIS	Division Special Education and Early Intervention Services
DOSFSS	Division of Student, Family and School Support
EBP	Evidence-Based Practice
FBA	Functional Behavioral Assessment
IDEA	Individuals with Disabilities Education Act
IEP	Individualized Education Program/Plan
JHU	Johns Hopkins University
KKI	Kennedy Krieger Institute
MASRO	Maryland Association of School Resource Officers
MDS ³	Maryland Safe and Supportive Schools
MHEC	Maryland Higher Education Commission
MSA	Maryland Student Assessment
MSDE	Maryland State Department of Education
MTSS	Multi –Tiered Systems of Support
NCAC	National Center on Accessing the General Curriculum
NCLB	No Child Left Behind
NCSSLE	National Center for Safe and Supportive Learning Environments
NIRN	National Implementation Research Network
ODR	Office Discipline Referral
OJJDP	Office of Juvenile Justice and Delinquency Prevention Model Programs

Appendix B: Acronyms

OSEP	Office of Special Education Program
OSHS	Office of Safe and Healthy Students
PBIS	Positive Behavioral Interventions and Support Program
PDSA	Plan, Do, Study, Act
PLC	Professional Learning Community
RP	Restorative Practices
RTI	Response to Intervention
S3	Safe and Supportive Schools
SAMHSA	Substance Abuse and Mental Health Services Administration
SEFEL	Social Emotional Foundations for Early Learning
SEL	Social Emotional Learning
SPHS	Sheppard Pratt Health System
SRO	School Resource Officer
SST	Student Support Team
SWPBS	School-wide Positive Behavioral Supports
SWPBIS	School-wide Positive Behavioral Interventions and Supports
UDL	Universal Design for Learning
USED	United States Department of Education
WWC	What Works Clearinghouse

Appendix C: Annotated Bibliography

Research and Policy

Colorado Legislative Council. (2011). *Report to the Colorado General Assembly, Legislative Task Force to Study School Discipline*. (Research Publication No. 606) Denver, CO: Author. Retrieved from <http://www.colorado.gov/>.

In 2010, Colorado formed the Legislative Task Force to Study School Discipline to research the “school-to-prison pipeline”, or the interaction of school discipline practices with the juvenile justice system in Colorado. The work of the task force is summarized in this report. The council defines disciplinary terms, presents alternatives to traditional disciplinary measures, and proposes new standards for data sharing on discipline outcomes and training for school resource officers. The task concludes with recommendations to the Colorado General Assembly, summarized in Bill A-Discipline in Public Schools.

Losen, D. J., Gillespie, J., & University of California, L. (2012). *Opportunities Suspended: The Disparate Impact of Disciplinary Exclusion from School*. *Civil Rights Project / Proyecto Derechos Civiles*.

In this report Losen and Gillespie present key findings from the Civil Rights Project at UCLA. According to data collected at national, state, and district levels, zero-tolerance policies have had a disparate impact on minority students and students with disabilities. National suspension rates, based on data for students in grades K-12 in 2009-2010, show that 17%, or 1 out of every 6 Black school children enrolled in K-12, were suspended at least once. This statistic is much higher than the 1 in 13 (8%) risk for Native Americans; 1 in 14 (7%) for Latinos; 1 in 20 (5%) for Whites; or the 1 in 50 (2%) for Asian Americans. Most concerning, 25% of Black children with disabilities enrolled in grades K-12 was suspended at least once in 2009-2010. The report also outlines recommendations to parents, child advocates, policymakers, educators, the media, and researchers for addressing the disparities in discipline that exist along lines of race, gender, and disability status.

Maryland State Department of Education. (2012). *Suspension Expulsions and Health Related Exclusions Maryland Public Schools*. Baltimore, MD: Author. Retrieved from http://www.marylandpublicschools.org/NR/rdonlyres/11C79F29-716F-4308-8EAF-EE5C4D8788DA/31327/susp11_revised.pdf.

This report contains school discipline data on the number of suspensions for each local school system in Maryland during the 2010-2011 school year. Each offense was categorized into one of eight categories: attendance, arson/fire/explosions, dangerous offenses, sex offenses, disrespect/disruption, weapons, threats/fighting, and other. The data was also disaggregated by gender, race, and disability status. The Maryland State Department of Education found that 8.1% of public schools students were suspended or expelled in Maryland during the 2010-2011 school year. Notably, 54% of all students suspended out-of-school were suspended for non-violent offenses. Additionally, over twice as many males than females were suspended in Maryland during the 2010-2011 school year. When the statewide data was disaggregated by race, Black students had the highest number of both in-school and out-of-school suspensions (33,484 out-of-school suspensions and 9, 731 in-school suspensions).

Maryland State Department of Education. (2012). *School Discipline and Academic Success: Related Parts of Maryland's School Discipline Reform*. Baltimore, MD: Author. Retrieved from <http://www.marylandpublicschools.org/NR/rdonlyres/42ED8EDA-AF34-4058-B275-03189163882D/32853/SchoolDisciplineandAcademicSuccessReportFinalJuly2.pdf>

In this report, the Maryland State Department of Education (MSDE) connects school discipline to academic success and institutes reforms that will allow this connection to happen in Maryland public schools. According to the report, “Every student who stays in school and graduates, college and career ready, adds to the health and welfare of the state of Maryland and improves the global competitiveness of this country.” School discipline policy should therefore focus on keeping students in school. The authors propose that each school system adopt a set of regulations that reflect a rehabilitative system of discipline. They also propose amendments that allow students who are suspended to receive minimum educational services and return back to school as quickly as possible. MSDE established the School Discipline Best Practices Workgroup to determine the types of professional development needed for teachers and school resource officers to accomplish these reforms. In addition, the authors direct MSDE to develop a

way to collect data on school arrests and referrals to criminal justice systems. Specifically, they are determined to end disproportionate impact of school discipline on minorities and special education students.

Skiba, R., Rausch, M., Ritter, S., & Indiana Univ., B. n. (2004). "Discipline is Always Teaching: Effective Alternatives to Zero-Tolerance in Indiana's Schools." Education Policy Briefs. Volume 2, Number 3, Summer 2004. Center For Evaluation And Education Policy, Indiana University.

In this article, Skiba, Rausch, and Ritter discuss the results of interviews with principals in ten schools in a mid-western state. Each interview lasted an hour and a half and was focused on how principals maintain school safety without emphasizing suspension and expulsion. From coding the transcriptions, the researchers found that three common themes emerged: proactive intervention, building connections with students, and creative options for more serious infractions. Specifically, principals implemented school-wide preventive programs and stressed the importance of a common language and expectations for discipline involving students, parents, and the entire school staff. Skiba recommends that the practices and programs proposed by these principals be models for school and community leaders in creating and maintaining safe schools for all students.

Skiba, R. J., & Indiana Univ., B. r. (2000). *Zero Tolerance, Zero Evidence: An Analysis of School Disciplinary Practice. Policy Research Report.*

In this policy research report, Skiba presents the history of policies and raises concerns regarding its effectiveness. In 1994, the federal government enacted the Gun-Free Schools Act, mandating for each state receiving federal funds to expel students found with firearms for a minimum of one-year. The passage of the Gun-Free Schools Act initiated a shift in school discipline towards zero-tolerance policies. These policies punish students harshly for major and minor infractions, hoping to send a message to students that certain behaviors will not be tolerated. Although zero-tolerance policies were designed in order to achieve safe schools, there is little evidence of their effectiveness. Rather, suspensions and expulsions have not been delivered consistently or fairly; minority students continue to be overrepresented in school punishments. Skiba concludes that "School suspension and expulsion appear to be effective

primarily in removing unwanted students from school. For troublesome or at-risk students, the most well-documented outcome of suspension appears to be further suspension, and eventually school dropout”. He advocates for a prevention model in school discipline. This model emphasizes creating a positive school climate, attending to early warning signs, and responding to discipline problems with a graduated system of consequences.

Texas Appleseed. (2010). *Texas’ School-to-Prison Pipeline: Ticketing, Arrest & Use of Force in Schools*. Austin, TX: Author. Retrieved from http://www.njfn.org/uploads/digital-library/Texas-School-Prison-Pipeline_Ticketing_Booklet_Texas-Appleseed_Dec2010.pdf

Texas Appleseed is an organization designed to promote social and economic justice for all Texans. In this report, Texas Appleseed explores the interaction of school discipline and gateways to the juvenile justice system, commonly termed the “school-to-prison pipeline”. The authors of the report analyze ticketing and arrest data collected over a five-year period (2001-2002 school year to 2006-2007 school year) for 26 Texan school districts. Most public schools in Texas now have a police officer assigned to patrol the school. Though the increase in SROs was intended to reduce disciplinary offenses, the increase in SROs has actually coincided with an increase in ticketing of students, especially for non-violent offenses. The authors of the report also conclude that the majority of offenses are non-violent offenses, minority and special education students are overrepresented in ticketing and arrests on school campuses, police officers in schools are using excessive force, and little or no attention has been paid to educational programming in juvenile detention facilities.

Texas Appleseed recommends that schools in Texas adopt a Positive Behavioral Supports (PBS) program, require training for school-based law enforcement personnel, require police departments to compile a searchable database for discipline data, and amend sections of the Education Code to limit the ticketing and arrest of students for non-violent offenses.

Practices: Multi-Tiered Systems of Support

Bradshaw, C. P., Koth, C. W., Thornton, L. A., & Leaf, P. J. (2009). Altering school climate through School-Wide Positive Behavioral Interventions and Supports: Findings from a group-randomized effectiveness trial. *Prevention Science, 10*, 100-115.

This 5-year randomized-controlled trial of 37 rural and suburban elementary schools in Maryland found that schools fully trained in School-Wide Positive Behavioral Interventions and Supports (SWPBIS) saw significantly higher staff-reported scores on organizational health items (resource influence, academic emphasis, staff affiliation, etc.) by the 3rd year of PBIS implementation than untrained schools.

Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2010). Examining the effects of Schoolwide Positive Behavioral Interventions and Supports on student outcomes: Results from a randomized controlled effectiveness trial in elementary schools. *Journal of Positive Behavior Interventions, 12*, 133-148.

School-level analyses of a 5-year randomized-controlled trial of 37 rural and suburban elementary schools in Maryland found that schools that had received comprehensive PBIS training were better able to implement all 7 key components of PBIS with fidelity. This faithful implementation, in turn, led to reductions in office discipline referrals and reductions in student suspensions. This highlights the importance of investing in professional development for school discipline policies as a way to support ultimate discipline-related goals.

Conduct Problems Prevention Research Group (2000). Initial impact of the Fast Track prevention trial for conduct problems: II. Classroom effects. *Annual Progress in Child Psychiatry and Child Development, 605-628*.

This study examined the effects of the universal (Tier 1) level of the Fast Track prevention model – the Promoting Alternative Thinking Strategies (PATHS) social-emotional learning curriculum and teacher consultation interventions. In a randomized controlled trial of 1st grade classrooms with students at high risk for long-term antisocial behavior, those classrooms using PATHS curriculum and consultation showed significantly fewer aggressive and disruptive behaviors by the end of the school year than those not implementing the program. These good

results seem to be due, at least in part, to teachers' abilities to implement the program with fidelity. Results should be accepted with caution, since it is unclear whether these reductions in negative behaviors were maintained into subsequent school years.

Domitrovich, C. E., Bradshaw, C. P., Greenberg, M. T., Embry, D., Poduska, J. M., & Jalongo, N. S. (2010). Integrated models of school-based prevention: Logic and theory. *Psychology in the Schools, 47*, 71-88.

This article describes the combination of the PAX-Good Behavior Game and another social emotional learning prevention program, Promoting Alternative Thinking Strategies (PATHS), into an integrated, curriculum-centered prevention program for schools, and provides early anecdotal support for the teacher acceptability, ease of implementation, and likelihood of positive student outcomes of the new program.

Fabelo, T., Thompson, M. D., Plotkin, M., Carmichael, D., Marchbanks, M. P., & Booth, E. A. (2011). *Breaking schools' rules: A statewide study of how school discipline relates to students' success and juvenile justice involvement*. College Station, TX: Public Policy Research Institute.

This report presents the findings of a statewide longitudinal study of Texas schools, which examined secondary school suspension and expulsion records, and their association with students' academic performance and juvenile justice system involvement. Results show the detrimental effects of traditional, punitive disciplinary practices on student outcomes, especially loss of instructional time and increased likelihood of student involvement with the juvenile justice system. Problematic aspects of traditional disciplinary policies include suspensions and expulsions for discretionary (non-violent) school violations and inconsistent application of consequences for the same violation across different demographic groups of students.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*, 405-432.

This article reviewed 213 studies of Social Emotional Learning (SEL) programs at the elementary, middle school, and high school levels, half of which were true randomized controlled trial (RCT) experiments, to assess the efficacy of this type of intervention. Overall, general education students receiving some type of SEL program had slightly to moderately fewer conduct problems ($ES = .22$). For those RCTs, treatment groups showed an average of 9-10% fewer conduct problems. Components of the programs varied, but in general, the more faithful the implementation of the program, the better the results.

Frey, K. S., Nolen, S. B., Edstrom, L. V. S., & Hirschstein, M. K. (2005). Effects of a school-based social-emotional competence program: Linking children's goals, attributions, and behavior. *Applied Developmental Psychology, 26*, 171-200.

Results of this 2-year, randomized controlled trial including 2nd and 4th graders in 15 elementary schools in Washington state found that students trained in social-emotional learning through the Second Step program had less aggression and more pro-social behaviors than their comparison peers not receiving Second Step training. Pro-social behavior differences were observed via multiple assessment sources (teacher report, student self-report, and observational data), making these findings robust evidence for the program's benefits.

Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W., & Esperanza, J. (2009). A randomized, wait-list controlled effectiveness trial assessing School-wide Positive Behavior Support in elementary schools. *Journal of Positive Behavior Interventions, 11*, 133-144.

This randomized-controlled trial of elementary schools in Illinois and Hawaii found that schools with teams fully trained in School Wide Positive Behavioral Interventions and Supports (SWPBIS) had higher staff-rated perceived school safety, as well as reduced office discipline referral rates and improved reading achievement scores. This lends tentative (because of study limitations) support for the beneficial effect of SWPBIS on improving school climate.

Justice Policy Institute (2011). *Education under arrest: The case against police in schools*. Washington, DC: Author.

This report evaluates the role of school resource officers (SROs) in increasing students' involvement with the juvenile justice system. Given that the traditional "security guard" role leads to more minor infractions being reported to law enforcement and students entering the justice system because of these infractions, the report recommends the use of evidence-based initiatives to reduce law enforcement involvement in schools. It also recommends professional development in preventive, positive approaches to school safety that will allow SROs to protect students from, not push them toward, incarceration.

Kellam, S. G., Brown, C. H., Poduska, J. M., Ialongo, N. S., Wang, W., Toyinbo, P., & Petras, H. (2008). Effects of a universal classroom behavior management program in first and second grades on young adult behavioral, psychiatric, and social outcomes. *Drug and Alcohol Dependence, 95S*, S5-S28.

This longitudinal study of low socio-economic status, urban African American students provides early support for the benefits of the Good Behavior Game (GBG), a classroom-based social-emotional learning prevention program developed to "socialize children into the role of student and to teach them to regulate their own and their classmates' behavior" (p. S7). Boys in first-grade with heightened aggression were most likely to benefit from the GBG in terms of reduced substance abuse by ages 19-21.

Luiselli, J. K., Putnam, R. F., Handler, M. W., & Feinberg, A. B. (2005). Whole-school positive behavior support: Effects on student discipline problems and academic performance. *Educational Psychology: An International Journal of Experimental Educational Psychology, 25*, 183-198.

This study of a high-poverty, urban, minority-majority grade-school supports the efficacy of a multi-tiered implementation of School-wide Positive Behavioral Interventions and Supports (SWPBIS) for improving school functioning. Results of the study found a direct link between implementation of key PBIS elements and reduced office discipline referrals (ODRs) and suspensions, greater staff satisfaction, and stronger test scores. The success of SWPBIS is likely due to its emphasis on professional development, transparent discipline policies, and data-based

decision-making at all levels of the school system; its focus on promoting positive relationships and a safe overall school climate; and its minimization of disciplinary actions' intrusion on classroom time.

Mihalic, S., Irwin, K., Fagan, A., Ballard, D., & Elliott, D. (2004). Successful program implementation: Lessons from *Blueprints*. *Juvenile Justice Bulletin*, July 2004. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

This report provides a set of recommendations for collaborating with organizations (schools, juvenile justice facilities, community programs) to implement successful violence or drug use prevention programs. It especially highlights the importance of staff buy-in, feedback, and collaboration at every step of pre-implementation planning, intervention implementation, and post-implementation maintenance and evaluation.

Osher, D., Bear, G. G., Sprague, J. R., & Doyle, W. (2010). *How can we improve school discipline?* *Educational Researcher*, 39, 48-58.

This article reviews the theoretical origins of three alternatives to traditional punitive discipline policies (ecological model, School-Wide Positive Behavioral Interventions and Supports (SWPBIS), and social emotional learning) and reviews the evidence base for these models. Finally, it provides recommendations for how to implement these discipline models, emphasizing that the first step is to shift schools' thinking about the origins of the discipline problem from that of the students to that of the school environment.

Reyes, M. R., Brackett, M. A., Rivers, S. E., Elbertson, N. A., & Salovey, P. (2012). The interaction effects of program training, dosage, and implementation quality on targeted student outcomes for the RULER approach to social and emotional learning. *School Psychology Review*, 41, 82-99.

Results of this study showed that the improvements to social emotional competence observed in students receiving the RULER intervention program were due almost exclusively to teachers providing the proper dosage of intervention and implementing the intervention with a high level of integrity. This supports the argument that implementation quality is crucial to the success of preventive discipline interventions.

Scott, T. M., & Barrett, S. B. (2004). Using staff and student time engaged in disciplinary procedures to evaluate the impact of School-Wide PBS. *Journal of Positive Behavior Interventions*, 6, 21-27.

This study of an urban Maryland grade school's implementation of PBIS presents an example of how student and teacher time spent in suspension and on office discipline referrals can be used to evaluate the influence of PBIS implementation on systemic functioning in schools. Among the most striking results was that a reduction in disciplinary pull-outs associated with implementation of PBIS translated to a two-year net gain of 29.5 additional days students stayed in the classroom, supporting the benefit of PBIS for enhanced academic learning.

Professional Development

Council of Chief State School Officers. (2011, April). Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards: A Resource for State Dialogue. Washington, DC: Author.

The InTASC standards are used by Maryland for teacher evaluations. This document provides insight into each of the standards and highlights the need for enhancing teacher professional development, and the importance of teachers continuing to learn. The InTASC model supports the use of Universal Design for Learning, Professional Learning Communities and Job-embedded Development to meet several of the listed standards.

Croft, A., Cogshell, J.G., Dolan, M., Powers, E., & Killion, J. (2010). *Job-embedded professional development: What it is, who is responsible, and how to get it done well*. National Comprehensive Center for Teacher Quality: Issue 1. (U.S. Department of Education cooperative agreement number S283B050051).

This article provides an in-depth look at job-embedded professional development including highlighting the conditions necessary for high quality professional development – such as teacher opportunities, community learning, and facilitator skills. The article discusses how state, district, and school leaders can support the development and implementation of such high-quality, job-embedded professional development.

Darling-Hammond, L. & Richardson, N. (2009). *Research review/Teacher learning: What matters? How Teachers Learn*, 66(5), 46-53.

This article provides a look into the research on how teachers learn and what types of professional development best support teacher learning. Darling-Hammond and Richardson's examination of research supported the need for professional development to provide opportunities for active learning and the need to apply that learning to practice. They also highlighted a number of suggestions for professional development programs for teachers.

Gaustad, J. (1992). *School discipline*. *Eric Digest*, 78. (Contract No. ED-99-C0-0011).

This article highlights issues in school discipline and the school characteristics associated with discipline problems within schools. It also provides suggestions for decreasing disruptive behavior, increasing positive behavioral and developing and implementing school-wide discipline plans.

Hartmann, E. (2011). *Universal design for learning*. National Consortium on Deaf-Blindness: Practice Perspectives, 8. Retrieved from: <http://www.nationaldb.org/NCDBProducts.php?prodID=141>

Although this article focuses specifically on applying Universal Design for Learning (UDL) to work with deaf-blindness in education, much of the information provided is applicable to all educational settings. The article provides good insight into using UDL in the classroom, the key foundations of UDL, and answers a number of important, frequently asked questions about UDL.

Huffman, J.B., Kristina, H.A., Pankake, A.M., & Moller, G. (2001). *Professional learning communities: Leadership, purposeful decision making, and job-embedded staff development*. *Journal of school leadership*, 11, 448-463.

This article reviews a study of how schools develop professional learning communities and the elements present in successful professional learning communities. The study examines schools at varying degrees of readiness for the development of such communities, and through interviews with principals and teachers, identifies three key characteristics distinguishing the high readiness from the low readiness schools.

Lancaster, P. (2008). *Universal Design for Learning*. *Colleagues*: Vol. 3: Iss. 1, Article 5.
Available at: <http://scholarworks.gvsu.edu/colleagues/vol3/iss1/5>

This brief article provides some historical background on Universal Design for Learning and insight into how this model applies to education. It is a helpful article for those wishing to learn a bit more about what Universal Design for Learning is and how it applies to students.

Stevens, Jane Ellen. (2012). *Lincoln High School in Walla Walla, WA, tries new approach to school discipline — suspensions drop 85%*. *ACES Too High News*. April 23, 2012

Available at: <http://acestoohigh.com/2012/04/23/lincoln-high-school-in-walla-walla-wa-tries-new-approach-to-school-discipline-expulsions-drop-85/?shared=email&msg=fail>

The article discusses a paradigm shift in responding to students with discipline issues from punitive to supportive. Lincoln High School Principal, Jim Sporleder is leading the Walla Walla schools in considering possible adverse childhood experiences. The Centers for Disease Control (CDC's) Adverse Childhood Experiences Study (ACE Study) measured ten common types of childhood trauma. Students were assigned an ACE score. The higher the ACE score, the higher the risk of health and social problems. Recognizing the impact of ACE allows staff to respond more effectively to support students in meeting behavioral expectations.

www.ULDcenter.org

This website provides comprehensive information about Universal Design for Learning (UDL) – including what it is, general guidelines for using and implementing UDL, federal regulations on use of UDL, and useful reference tools for practitioners. This website also includes informative videos and graphics to illustrate how UDL can be applied to educational settings as well as a free series of media presentations about UDL.

Companion Document to the
Report on Best Practices in School Discipline



February 2014

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Introduction

In July 2012, the Maryland State Board of Education (Board) issued a report, School Discipline and Academic Success: Related Parts of Maryland's Academic Reform, outlining its desire to implement discipline reforms. The Board tasked the Maryland State Department of Education (MSDE) to establish a statewide workgroup to explore best practices in school discipline that could help to guide the reforms.

The workgroup, as charged, conducted an extensive literature review, consulted with experts in the field, and created The Best Practices in Discipline Report. In addition, this companion document was produced to provide research most pertinent to the report.

A Generation Later: What We've Learned about Zero Tolerance in Schools

Jacob Kang-Brown • Jennifer Trone • Jennifer Fratello • Tarika Daftary-Kapur

ISSUE BRIEF • DECEMBER 2013

ABOUT THIS POLICY BRIEF

DIRECTORS' NOTE

The Vera Institute of Justice has a deep interest in helping schools prevent young people from becoming involved in the justice system. Our work in this area began more than a decade ago, when Vera partnered with local and state leaders to analyze and improve school disciplinary and safety practices in New York. Today we work nationally to reengage truant youth in school and keep them out of court.

Part of that work involves reexamining “zero tolerance” policies that mandate suspension or expulsion of students for misconduct. Over the past 25 years, these policies have gained tremendous momentum while also inviting deep controversy. This publication discusses research on zero tolerance, with a focus on what we do and don't know. What's clear, based on the evidence: a generation after the rise of these policies and practices, neither schools nor young people have benefited. Fortunately, as described in this brief, promising alternatives to zero tolerance can safely keep young people where they belong— in school.

Annie Salsich, Director
Jennifer Fratello, Director of Research
Center on Youth Justice

In considering different strategies for promoting productive and safe school environments, it can be difficult to know what works and what doesn't. In particular, longstanding debates about zero tolerance policies leave many people confused about the basic facts. How do these policies that mandate specific and harsh punishments affect individual students and the overall school environment? Have zero tolerance policies helped to create a school-to-prison pipeline as many people argue? And if the costs outweigh the benefits, are there alternatives to zero tolerance that are more effective?

This publication aims to answer these questions by drawing on the best empirical research produced to date, and to identify the questions that remain unanswered. Most importantly, this publication strives to be practical. We believe that with a clearer understanding of the facts, policymakers and school administrators can join with teachers and concerned parents to maintain order and safety in ways that enhance education and benefit the public interest.

UNDERSTANDING HISTORY: THE RISE OF ZERO TOLERANCE POLICIES

The culture of discipline in educational settings has changed profoundly over the past 25 years. Disciplinary systems today are much more formal—in many cases, rigid—and severe punishments are applied more broadly, affecting more students. Instead of principals and other school administrators dealing with misconduct on a case-by-case basis, considering the circumstances of the event, the specific students involved, and the repercussions for the overall safety of the school environment, many school districts now have zero tolerance policies that greatly limit discretion in individual cases, involve law enforcement personnel, and mandate removing students from school.¹ These policies generally require out-of-school suspension or expulsion on the first offense for a variety of behaviors—initially instituted for possession of a weapon or illegal drugs, but now frequently also including smoking tobacco or fighting in school.

The changes began in the late 1980s and quickly gained momentum, fueled in large part by rising rates of juvenile arrests for violent crimes and a climate in which young people were increasingly seen as dangerous.² Feeling pressure to do something, Congress applied the rhetoric and intention of tough-on-crime laws to the school environment and passed the Gun-Free Schools Act in 1994.³

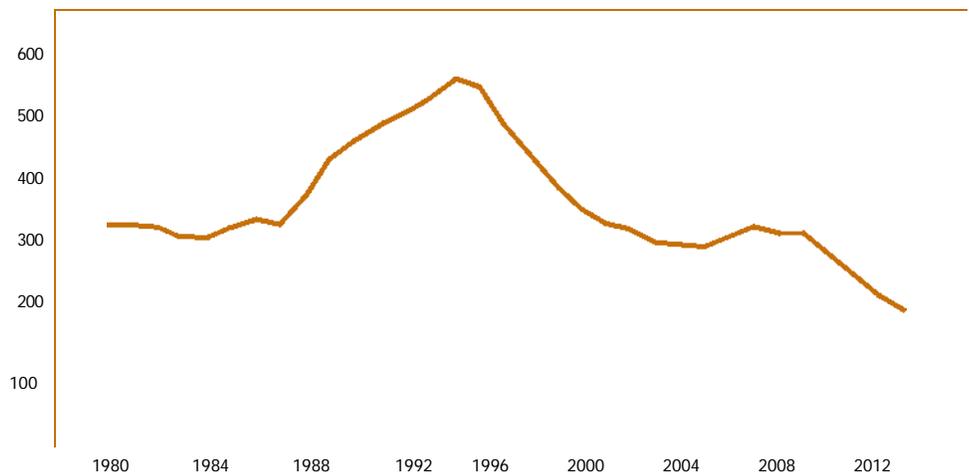
As a result, to qualify for federal education funds, states had to pass a law requiring all local school districts to expel any student, for at least one year, who brings a weapon to school.

Although the juvenile crime rate peaked in 1994 and declined steadily over the next decade, the idea that young people should be feared stuck. In 1996, political scientist John DiIulio predicted a coming wave of young “super-predators.”⁴ Following the massacre in 1999 at Columbine High School, people across the country worried that the next devastating school shooting would occur in their town. This is the climate in which zero tolerance policies proliferated and also expanded to encompass a wide range of misconduct much less harmful than bringing a weapon to school.⁵ As early as the 1996–97 school year, 79 percent of schools had adopted zero tolerance policies for violence, going beyond federal mandates.⁶ To put some muscle behind these policies, the federal government and states began to increase funding for security guards and other school-based law enforcement officers and later to install metal detectors. Between the 1996–97 and 2007–08 school years, the number of public high schools with full-time law enforcement and security guards tripled.⁷ This shift in school disciplinary policy and practice mirrored changes in the juvenile justice system to make it more closely resemble the adult system.⁸

The Rise and Fall of U.S. Youth Violent Crime Rates

Juvenile Violent Crime Arrests per 100,000 10-17 year olds

The juvenile violent crime rate—as measured by youth arrests for violent crime—peaked in 1994 and declined steadily over the next decade. Youth arrests for violent crime are at now at historically low levels, as the chart at the right shows.



Source: FBI Uniform Crime Report National Arrest Statistics for Juveniles, 1980-2012.

SUSPEND AND EXPEL

An estimated two million students annually are suspended from secondary schools.

The most obvious result of the rise in zero tolerance policies is well documented: The use of out-of-school suspension and expulsion increased almost everywhere and dramatically so in some places. Nationally, the number of secondary school students suspended or expelled over the course of a school year increased roughly 40 percent from one in 13 in 1972–73 to one in nine in 2009–10.⁹ In recent years, an estimated two million students annually are suspended from secondary schools.¹⁰ As a point of comparison, slightly more than three million students graduated high school in 2013.¹¹

A rigorous and detailed study of students in Texas published in 2011 by the Council of State Governments and the Public Policy Research Institute at Texas A&M University shows how the culture of zero tolerance became so pervasive in that state that harsh punishments are meted out even when they are not strictly required.¹² Researchers tracked every student who entered seventh grade in 2000, 2001, and 2002 for six years. They found that more than half (60 percent) were suspended or expelled at some point in middle or high school. Moreover, the majority of those suspensions and expulsions appear to be for offenses that did not involve behaviors that fell within the parameters of the state of Texas zero-tolerance mandate; instead, they were simple violations of the school's code of conduct, such as using tobacco or acting out in ways that teachers find to be disruptive. In other words, school administrators chose to use harsh punishments even when they had the discretion to do otherwise.

It is important to keep in mind that both national and statewide statistics on school discipline mask wide variation among schools. In the Texas study, for example, even similar schools with similar student populations varied widely in the proportion of students that were suspended or expelled.¹³ Some researchers argue that there is now more variation in both the content and implementation of zero tolerance policies, with some schools punishing both major and minor misconduct harshly while others define and practice zero tolerance as a system of graduated sanctions in which the severity of the punishment matches the seriousness of the offense.¹⁴

HARSHER ON SOME STUDENTS THAN OTHERS

There is abundant evidence that zero tolerance policies disproportionately affect youth of color.¹⁵ Nationally, black and Latino students are suspended and expelled at much higher rates than white students. Among middle school students, black youth are suspended nearly four times more often than white youth, and Latino youth are roughly twice as likely to be suspended or expelled than white youth.¹⁶ And because boys are twice as likely as girls to receive these punishments, the proportion of black and Latino boys who are suspended or expelled is especially large.¹⁷ Nationally, nearly a third (31 percent) of black boys in middle school were suspended at least once during the 2009–10 school year. Part of this dynamic is that under-resourced urban schools with higher populations of black and Latino students are generally more likely to respond harshly to misbehavior.¹⁸

The study in Texas echoes these national statistics and also provides important evidence of an actual inequity in how schools apply these punishments. After controlling for more than 80 individual and school characteristics normally associated with poor academic performance, as well as differences in rates of delinquency and more serious offending, researchers found that black youth were more likely to be disciplined and more likely to receive harsh discipline (such as out-of-school suspension) when those punishments were discretionary.¹⁹

Race is not the only factor associated with an increased likelihood of being suspended or expelled. Students with special education needs are also suspended or expelled at higher rates. Annually, high school students with disabilities of

Among middle school students, black youth are suspended nearly 4 times more often than white youth, and Latino youth are roughly twice as likely to be suspended or expelled than white youth.

any sort are nearly three times more likely to receive an out-of-school suspension compared to high school students without disabilities (20 percent versus 7 percent). In the Texas study where almost 60 percent of students were suspended or expelled at least once, the rate among students with educational disabilities reached nearly 75 percent. Rates were highest among students with learning disabilities and emotional disturbances.

Nationally, only 5 percent of expulsions and out-of-school suspensions lasting a week or longer involve possession of a weapon while 43 percent are for insubordination.

NET ZERO: ZERO TOLERANCE POLICIES DON'T MAKE SCHOOLS MORE ORDERLY OR SAFE

Effective discipline plays an important role in schools. It helps to maintain an environment that is conducive to learning by minimizing disruption in the classroom and by fostering the kind of order and predictability that young people need to feel comfortable and remain open to new information and experiences.²⁰ Discipline can also make a school environment safer for everyone by preventing potentially dangerous, or even deadly, events.

The theory underlying zero tolerance policies is that schools benefit in both ways when problem students are removed from the school setting. However, there is no research actually demonstrating this effect. No studies show that an increase in out-of-school suspension and expulsion reduces disruption in the classroom²¹ and some evidence suggests the opposite effect.²² In general, rates of suspension and expulsion appear unrelated to overall school success for schools with similar characteristics, levels of funding, and student populations.²³

Although zero tolerance policies were created to respond to students caught with a weapon, only five percent of serious disciplinary actions nationally in recent years involve possession of a weapon.²⁴ In some states the proportion is even lower. In Maryland, for example, less than two percent of suspensions and expulsions are related to carrying a weapon in school,²⁵ and in Colorado, it is less than one percent.²⁶ In contrast, nationally 43 percent of expulsions and outof-school suspensions lasting a week or longer were for insubordination.²⁷

While some people would argue that these statistics are evidence of the deterrent effect of zero tolerance, there is no research demonstrating that the threat of harsh punishment actually discourages students from bringing a weapon to school. In addition, survey data collected by the Centers for Disease Control and Prevention show just a modest decline in the proportion of students who claim to have brought a weapon to school in the previous 30 days: 17 percent in 2011, down from 22 percent in 1993.²⁸

What the research does show is that over the past two decades, youth crime has become less serious and violent. In fact, the increase in out-of-school suspensions and expulsions occurred at a time when, nationally, rates of serious violent crime among juveniles were falling to the point where they are now the lowest that they've been in decades.²⁹ At the state level we see similar, and sometimes more dramatic, patterns: in Colorado, where less than one percent of serious disciplinary actions involve possession of a weapon, the overall number of juvenile arrests has been declining since 1991, and is about 70 percent lower today compared to the early 1990s.³⁰ The situation in California is similar: the number

of felony arrests of juveniles is about 61 percent lower than it was in 1991, and the overall number of youth arrested is at an all-time low.³¹

FROM SUSPENSION TO DISENGAGEMENT

Some of the most rigorous research conducted on the subject of zero tolerance shows that out-of-school suspension can severely disrupt a student's academic progress in ways that have lasting negative consequences. For similar students attending similar schools, a single suspension or expulsion doubles the risk that a student will repeat a grade.³² Being retained a grade, especially while in middle or high school, is one of the strongest predictors of dropping out.³³ In one national longitudinal study, youth with a prior suspension were 68 percent more likely to drop out of school.³⁴

The long-term effects of failing to complete high school are well documented. Individuals without a high school education have much less earning power and are more likely to be unemployed. In 2012, for example, median earnings among workers nationally was \$815 per week, while those without a high school degree earned just \$471 per week.³⁵ And unemployment rates were roughly double: 6.8 percent nationally and 12.4 percent among people who had not completed high school.³⁶

Research has revealed an unexpected relationship between misconduct in school and academic achievement. One longitudinal study showed that, while being disconnected from school as a result of student misconduct adversely affects academic achievement, misconduct itself is not directly associated with lower academic achievement.³⁷ In other words, the misconduct alone does not necessarily lead to poor academic performance. The finding suggests the importance of keeping young people engaged in school, even when, and maybe especially when, they are having behavioral problems.

IS THE SCHOOL-TO-PRISON PIPELINE REAL?

Out-of-school suspension is strongly associated with subsequent involvement in the juvenile justice system. The best evidence of this pathway comes from the Texas study, in which a single suspension or expulsion for a discretionary offense that did not include a weapon almost tripled a student's likelihood of becoming involved in the juvenile justice system in the following academic year.³⁸ The longer-term effects, however, are unclear. While researchers at the Vera Institute of Justice attempted to study this issue, our findings were inconclusive. We still don't know if exposure to harsh discipline in middle or high school—in particular suspension and/or expulsion—increases a person's likelihood of spending time in prison as an adult.³⁹ We also do not know what effect simply attending a school that practices zero tolerance has on students in the long-term, regardless of whether they are suspended or expelled. (See "The Challenge of Mapping a School-to-Prison Pipeline," on page 8).

While questions linger about the effects of zero tolerance on long-term criminal justice involvement, there is research demonstrating the importance of staying in school: Additional years of compulsory education do help to prevent young

people from engaging in delinquency and crime.⁴⁰ In addition, there is some evidence that a positive school climate not only lowers overall levels of violence in school, but may also have some beneficial effect on the behavior of young people outside of school, although the relationship is neither simple nor clear.⁴¹

THE TIDE HAS TURNED

Taken together, the research findings and other data on zero tolerance suggest that these policies – which have been in force for 25 years – have no real benefit and significant adverse effects. In August 2013 in a speech before members of the American Bar Association, U.S. Attorney General Eric Holder talked about the need to confront zero tolerance policies that “do not promote safety” and called on those assembled to remember that educational institutions should be “doorways of opportunity.”⁴² “A minor school disciplinary offense should put a student in the principal’s office and not a police precinct,” the Attorney General said.⁴³ Both the American Academy of Pediatrics and the American Psychological Association have issued statements effectively condemning zero tolerance policies, given their harmful effects, and called instead for students to be disciplined on a case-by-case basis and in a developmentally appropriate manner.⁴⁴ Clearly, youth advocates are no longer the lone or loudest voices for change. The tide is turning and it has been for some time.

There’s growing consensus that the most effective schools reinforce positive behavior and respond to behavioral problems on a case-by-case basis in ways that suit the individual’s circumstances and needs. That implies a return to discretion, but with some structure and guidance. There’s still not much research to support this approach, but a recent study showed that positive behavioral support in the classroom is associated with greater order and discipline, fairness, and productive student–teacher relationships, while exclusionary disciplinary strategies (i.e., out-of-school suspension and expulsion) are associated with more disorder overall.⁴⁵ In July 2011 the U.S. Department of Justice and the U.S. Department of Education announced the creation of the Supportive School Discipline Initiative, which seeks to “promote positive disciplinary options to both keep children in school and improve the climate for learning,” among other goals.⁴⁶

Across the country, state departments of education and municipal school districts are moving away from zero tolerance policies. In 2012, legislators in Colorado revised the state law governing school discipline to encourage school districts to rely less on suspension and expulsion and also mandated and funded additional training for police officers that serve as school resource officers (SROs).⁴⁷ While not every school district has revised its code of conduct, and SROs will not receive the mandated training until 2014, the state has already observed the impact with a 27 percent drop in expulsions and 10 percent decrease in suspensions statewide compared with the previous year.⁴⁸

Two years earlier, in 2010, the Boston public school system revised its code of discipline—renaming it a code of conduct—and also implemented restorative justice practices (see “Accentuate the Positive” on page 7) as alternatives to suspension and expulsion. As a result, the number of students suspended or expelled dropped from 743 to 120 in just two years.⁴⁹ Officials in Buffalo, New

There’s growing consensus that the most effective schools reinforce positive behavior and respond to behavioral problems on a case-by-case basis in ways that suit the student’s individual circumstances and needs.

York, made significant changes to the school code for the 2013–14 school year, expanding their commitment to keeping students in school through a system of prevention, intervention, and promoting positive behavior, including both Positive Behavioral Interventions and Supports, or PBIS for short, and restorative practices.⁵⁰ And in California, where “willful defiance” accounted for nearly half (48 percent) of the more than 700,000 suspensions statewide in 2011–12, the Los Angeles Unified School District Board banned willful defiance as a reason for suspension or expulsion.⁵¹

CONCLUSION

We do not know all of the effects of a generation of zero tolerance policies in our nation’s schools, but there is enough information to compel a move away from these practices. Certain facts are clear: zero tolerance does not make schools more orderly or safe—in fact the opposite may be true. And policies that push students out of school can have life-long negative effects, perhaps severely limiting a young person’s future potential. That is troubling on an individual level for every boy and girl affected and of grave public concern when school systems exclude a significant proportion of the student body, as is the case in more than 300 districts nationwide that suspend and expel more than one in four of their secondary students.⁵² Similarly, while we don’t fully understand the potential benefits of taking a very different approach to maintaining order and safety in schools, there is a growing body of experience that education administrators and school principals can draw on to inspire and guide their local reform efforts, and that researchers can use to add to the field of “what works.”

Zero tolerance does not make schools more orderly or safe – in fact the opposite may be true. And policies that push students out of school can have life-long negative effects.

ACCENTUATE THE POSITIVE

School administrators interested in taking a positive approach to discipline need not start from scratch. There are models to consider and use. One of the most well known is Positive Behavioral Interventions and Supports (PBIS), a method designed to be used school-wide to teach and encourage pro-social skills and behaviors.⁵³ Schools that use PBIS tend to be less reactive and exclusionary in the use of discipline and tend to have more engaging and productive learning environments. As a result, students exposed to PBIS have better educational outcomes and more pro-social behavior and are subject to 33 percent fewer disciplinary referrals.⁵⁴ A recent randomized trial of PBIS in elementary schools in Maryland found that it had a significant positive affect on a wide range of behavior, from the ability to concentrate to the ability to regulate emotions.⁵⁵

Restorative practices are another promising approach. These programs are based on the ideas of restorative justice—an approach that treats crime as a harmful act against an individual and a community, and not against the state, and thus focuses on holding the offender accountable for rectifying the harm that they’ve done—and look for ways to mediate conflicts and resolve problems through conversations between misbehaving students, other youth, and/or teachers.⁵⁶ Also notable is Response to Intervention (RTI), an approach developed specifically for students with learning difficulties who are not currently identified as needing special education, in which schools respond to needs and adjust interventions depending on the student’s responsiveness, using different tiers of interventions.⁵⁷ More research is needed to understand the likely benefits of these and other programs relative to the administrative costs of implementing them.

THE CHALLENGE OF MAPPING A SCHOOL-TO-PRISON PIPELINE

In 2012, with support from the Spencer Foundation, the Vera Institute of Justice launched a study to better understand how school disciplinary policies might affect short- and long-term involvement in the justice system. Researchers relied primarily on data from the National Longitudinal Study of Adolescent Health (Add Health), which is a nationally representative sample of adolescents enrolled in school during the 1994-95 academic year. The Add Health dataset captures information about school practices and the behavior of youth from the perspective of school administrators, parents, and students themselves.

Researchers attempted to examine whether a school's disciplinary policies and other aspects of the school climate had any relationship to juvenile delinquency, adult crime, and other measures of justice system involvement. While much of the research cited in this brief looks at the individual effects of being expelled or suspended on justice system involvement, the Vera study set out to broaden those

analyses by examining the effect of simply attending a school with zero tolerance policies, regardless of whether an individual was suspended or expelled. In other words, what effect do these policies have on the student population as a whole? Researchers also looked for potential indirect effects, examining whether the school climate might influence students' peers, family circumstances, and overall communities in ways that led to greater involvement with the justice system. They found no evidence that attending a school with zero tolerance policies either deters delinquency or places youth at a higher likelihood of becoming justice system-involved, in the short- or long-term.

However, there are challenges to studying long-term criminal justice system outcomes—especially when studies rely on self-reported data from individuals who do end up involved in the system—that present notable limitations to longitudinal research on this topic and the conclusions that can be drawn. For example, in later waves of follow-up Add Health data collection, youth who became involved in the criminal justice system as adults were less likely to participate, which made it difficult to accurately measure their long-term outcomes.⁵⁸

These challenges point to the need for additional, complementary research designs—for example, studies that focus on the life course of those who have been involved with the justice system, looking closely at whether and under what circumstances they have been excluded from school, and in the context of a multitude of factors in their lives to better understand their trajectories into and out of the juvenile and criminal justice systems.

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FOR MORE INFORMATION

For more information about alternatives to zero tolerance and creating a supportive and safe learning environment consult the Supportive School Discipline Webinar series funded and hosted by the Department of Education, the Department of Health and Human Services, and the Department of Justice.

<http://www.juvenilejustice-tta.org/events/ssdWebinarSeries>

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ASPE RESEARCH BRIEF

OFFICE OF THE ASSISTANT SECRETARY FOR PLANNING AND EVALUATION
 OFFICE OF HUMAN SERVICES POLICY - U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

CORE INTERVENTION COMPONENTS: IDENTIFYING AND OPERATIONALIZING WHAT MAKES PROGRAMS WORK

Executive Summary

Rather than being based on hunches and best guesses, intervention programs are increasingly expected to be evidence-based. However, when evidence-based programs are replicated or scaled up, it is critical not only to know whether a program works, but which program elements are essential in making the program successful. To date, though, few programs have had hard data about which program features are critical “core components” and which features can be adapted without jeopardizing outcomes.

What information is needed to select and implement programs that address the needs of identified populations? “Core components” include the functions or principles and related activities necessary to achieve outcomes. Strategies for a well-operationalized program include a clear description of: the context of the program; the core components; the active ingredients to operationally define the core components so they can be taught and learned and can be implemented in typical settings; and a practical strategy for assessing the behaviors and practices that reflect the program’s values and principles, as well as the program’s active ingredients and activities. Also, when outcomes are not achieved, an understanding of core components and whether they were implemented correctly is essential to understanding whether a program is ineffective, or alternatively, whether it was not implemented well.

Key Take-Away Messages

- Usability testing research that identifies, measures, and tests the efficacy of program core components or “active ingredients” can improve our understanding of which program elements are essential for evidence-based

ABOUT THIS RESEARCH BRIEF

This research brief was written by Karen Blase, PhD, and Dean Fixsen, PhD, of the National Implementation Research Network and the Frank Porter Graham Child Development Institute at the University of North Carolina at Chapel Hill.

In 2010, ASPE awarded Child Trends a contract for the project “Emphasizing Evidence-Based Programs for Children and Youth: An Examination of Policy Issues and Practice Dilemmas Across Federal Initiatives”. This contract was designed to assemble the latest thinking and knowledge on implementing evidence-based programs and developing evidence-informed approaches. This project has explored the challenges confronting stakeholders involved in the replication and scale-up of evidence-based programs and the issues around implementing evidence-informed strategies. Staff from ASPE’s Division of Children and Youth Policy oversaw the project.

As part of this contract, three research briefs have been developed that focus on critical implementation considerations.

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- programs and practices to produce desired outcomes.
- Program funders should consider including requirements to specify the core components of interventions as deliverables at the end of a demonstration or pilot phase to facilitate replication and scalability.
 - Decision-makers seeking to select and validate intervention might ask program developers for a description of intervention's core components, the rationales underlying each core component, fidelity measures, and measures of processes and outcomes.
 - Policymakers should require that evidence-based program implementations include plans for defining, operationalizing and validating core components to ensure alignment with desired outcomes, and ongoing assessments of fidelity in delivering the core components to maintain and improve outcomes over time.
 - Program developers should consider monitoring the potential social and participant-level costs when core components are missing or not clearly articulated to understand why developing core components is a sound, efficient, and strategic approach to achieving positive outcomes.

Since issues related to the core components of interventions are relevant to producing new knowledge about what works and for moving science to practice in socially significant ways, this brief is relevant for a range of professionals and stakeholders, including program developers, researchers, implementers, and policy makers.

CORE INTERVENTION COMPONENTS: IDENTIFYING AND OPERATIONALIZING WHAT MAKES PROGRAMS WORK

Purpose

This brief is part of a series that explores key implementation considerations. It focuses on the importance of identifying, operationalizing, and implementing the “core components” of evidence-based and evidence-informed interventions that likely are critical to producing positive outcomes. The brief offers a definition of “core components”, discusses challenges and processes related to identifying and validating them, highlights rationales for the importance of operationalizing core components, and explores implications for selecting, funding, implementing, scaling up, and evaluating programs. Since the issues related to core components of interventions are relevant to producing new knowledge about what works and for moving science to service in socially significant ways, this brief is relevant for a range of professionals and stakeholders, including program developers, researchers, implementers, and policy makers.

Background and Introduction

Increasingly, agencies, communities, and funders are driven to make a difference by using the best information that social science has to offer. Also, service recipients and communities are becoming increasingly savvy about asking for the data that demonstrate that programs or practices are likely to result in positive outcomes. Given the effort, time, and expense required to establish and sustain services and interventions, the return on this investment matters deeply for all stakeholders.

But what information is needed to select and implement programs that address the needs of identified populations? What data matter most? Can outcome data tell the whole story? Increasingly, researchers, evaluators, and program developers are discussing the importance of identifying the core components of complex interventions. Those who use data to make decisions (e.g., grant makers, foundations, policy makers, agency directors, and intermediary organizations) are interested in understanding which program or practice elements are “essential” and which ones can be modified without jeopardizing outcomes.

EMPHASIS ON EVIDENCE

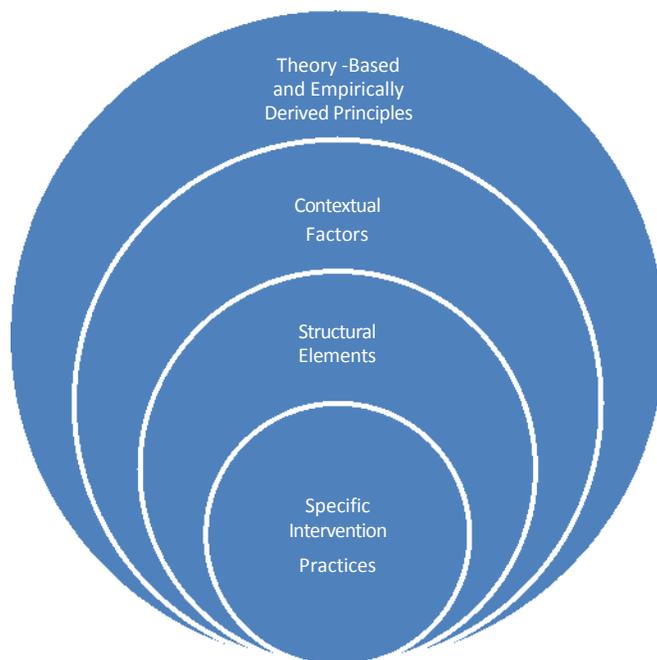
The Federal government has made a strong commitment to supporting evidence-based and evidence-informed programs, particularly for children and youth. Recent examples include: the Maternal, Infant, and Early Childhood Home Visiting Program, the Teen Pregnancy Prevention Initiative, the Permanency Innovations Initiative, the Social Innovation Fund, and the Investing in Innovation (i3) Fund.

What Do We Mean By “Core Components”?

For the purposes of this brief, we use the term core components to refer to the essential functions or principles, and associated elements and intervention activities (e.g., active ingredients, behavioral kernels; Embry, 2004) that are judged necessary to produce desired outcomes. Core components are directly related to a program’s theory of change, which proposes the mechanisms by which an intervention or program works. The core components are intended to, or have been demonstrated through research to, positively impact the proximal outcomes that address the identified needs and that increase the likelihood that longer-term outcomes will be achieved. In short, the core components are the features that define an effective program.

Core components can be cast as theory-driven, empirically derived principles and then further operationalized as the contextual factors, structural elements, and intervention practices that are aligned with these principles. For example Multi-Systemic Therapy details nine such principles, such as, “Interventions should be present-focused and action-oriented, targeting specific and well-defined problems” (Henggeler, Schoenwald, Liao, Letourneau & Edwards, 2002, p. 157). Multidimensional Treatment Foster Care articulates four such principles, such as, “providing the youth with a consistent reinforcing environment where he or she is mentored and encouraged” (Chamberlain, P., 2003, p. 304). Incredible Years posits social learning principles as core elements of the various school and parent training programs (e.g., Webster-Stratton & Herman, 2010). Sexton and Alexander (2002), surveyed the qualitative and meta-analytic reviews of research related to family-based interventions in the context of Principles of Empirically Supported Interventions (PESI), describing how such empirically derived principles can aid in identifying and developing effective treatment approaches as well as research agendas. Core components, cast as principles, inform the specification of contextual aspects of the interventions (e.g., interventions occur in schools or communities, parent and community involvement, interventions occur in families’ homes), structural elements (e.g., a low adult/child ratio, the required number and sequence of sessions), and specific intervention practices (e.g., teaching problem-solving and communication skills, practicing social skills, reinforcing appropriate behavior).

Figure 1. Core Components - From Principles to Practices



Challenges in Identifying and Validating Core Components

The core components may be developed over time by experimentally testing a theory of change (e.g., what are the mechanisms by which we expect change to occur) and by developing and

validating fidelity measures (e.g., was the intervention done as intended) that reflect the core components. Core components can be identified through causal research designs (e.g., randomized control trials, quasi-experimental designs, single-subject designs) that test the degree to which core components produce positive outcomes, as compared to results that occur in the absence of these core components. Research that demonstrates a positive correlation between high fidelity and better outcomes also increases our confidence in and understanding of the core components (e.g., higher fidelity is associated with better outcomes). However, causality cannot be inferred from such correlational research.

Core components are often equated with measures of fidelity; but such measures do not necessarily tell the whole story about what is required for effective use of an intervention in typical service settings. Moreover, identifying and validating core components through the creation of valid, reliable, and practical measures of fidelity is not a simple task. It requires research over time and across replications. Efforts to create, test, and refine fidelity measures have been conducted for programs for children and families (Schoenwald, Chapman, Sheidow & Carter, 2009; Henggeler, Pickrel, & Brondino, 1999; Bruns, Burchard, Suter, Force, & Leverentz-Brady, 2004; Forgatch, Patterson, & DeGarmo, 2005) and for programs serving adults (Bond, Salyers, Rollins, Rapp, & Zippel, 2004; Propst, 1992; Lucca, 2000; Mowbray, Holter, Teague, & Bybee, 2003; McGrew & Griss, 2005). These studies chronicle the challenges of creating fidelity measures that not only reflect the core components, but also are practical to use in typical service settings and are good predictors of socially important outcomes. Concerted effort over time by teams of researchers seems to be required to produce valid and serviceable assessments of fidelity.

While teams of researchers have successfully taken on the task of better articulating and validating the core components of some programs (Henggeler et al., 2002; Chamberlain, 2003; Forgatch et al., 2005; Webster-Stratton & Herman, 2009), on the whole, there are few adequately defined programs in the research literature that clearly detail the core components with recommendations on the dosage, strength, and adherence required to produce positive outcomes. The source of this problem has been documented by Dane and Schneider (1998). These authors summarized reviews of over 1,200 outcome studies and found that investigators assessed the presence or strength of the independent variables (the core intervention components) in only about 20 percent of the studies, and only about 5 percent of the studies used those assessments in their analyses of the outcome data. A review by Durlak and DuPre (2008) drew similar conclusions. The challenge is further exacerbated by the lack of commonly accepted definitions or criteria related to the verification of the presence or validation of the independent variables (the core components that define the program) in gold standard, randomized control studies. This means that the published research literature is likely a poor source of information about the functional core components of interventions, evidence-based, or otherwise.

One reason that very few program evaluations are able to actually research which components of the program are most strongly related to positive outcomes is that, in demonstration projects, extra efforts are made to insure that the program is implemented with fidelity, thus eliminating variations. An exception to this occurred in the early research on the Teen Outreach Program (TOP) where some variations in program implementation did occur because the program did not yet have “minimum standards” and site facilitators took liberties with the curriculum and

volunteer service components of the program (Allen, Kuperminc, Philliber and Herre, 1994, Allen et al., 1990). Variations in facilitator “style” also occurred, and data were collected on how interactions with facilitators and others were perceived by students.

The Teen Outreach research found that presence of volunteer community service was related to positive outcomes including less failure of school courses, lower rates of teen pregnancy, and lower rates of school suspension. On the other hand, variations in the amount of classroom time and exact fidelity to the curriculum were not related to these outcomes. This research also found that, when students said they had a great deal of input in selecting the volunteer work they would do and that this work was truly important, they had more positive outcomes (Allen, Philliber, Herrling, and Kuperminc, 1997). After this research was completed, the TOP adopted minimum standards for replication of TOP including 20 hours of community service and choice regarding volunteer work viewed as important by the teen. TOP also requires 25 curriculum sessions, but program facilitators can use any of the curriculum sessions they choose. In communities where teaching about sex is prohibited or restricted, this left facilitators free to leave out those lessons since their inclusion had not been shown to affect outcomes. In addition, training for TOP facilitators stresses that this is a curriculum to truly be facilitated rather than taught, and that, at the end of the program, young people should report that they did most of the talking. Fidelity data for TOP currently include measures of each of these important core components derived from examining variations in program practices and protocols as related to outcomes.

With such exceptions, there is, as noted by Dane and Schneider (1998) and Michie, Fixsen, Grimshaw, and Eccles (2009), little empirical evidence to support assertions that the components named by an evidence-based program developer are, in fact, the functional, or only functional, core components necessary for producing the outcomes. In their examination of intervention research studies, Jensen and his colleagues (Jensen, Weersing, Hoagwood, & Goldman, 2005) concluded, “when positive effects were found, few studies systematically explored whether the presumed active therapeutic ingredients actually accounted for the degree of change, nor did they often address plausible alternative explanations, such as nonspecific therapeutic factors of positive expectancies, therapeutic alliance, or attention” (p 53). This may mean that the mention or failure to mention certain components by a program developer or researcher should not be confused with their function or their lack of function in the producing hoped for outcomes in the intervention settings.

Thus, the current literature regarding evidence-based programs heavily focuses on the quality and quantity of the “evidence” of impacts. And the vetting of research design, rigor, number of studies, and outcomes has resulted in rosters of evidence-based programs such as SAMHSA’s National Registry of Evidence-Based Programs and Practices (<http://nrepp.samhsa.gov>), Blueprints for Violence Prevention (<http://www.colorado.edu/cspv/blueprints/>) with various criteria and rankings (e.g., evidence-based, evidence-informed, and promising) based on reviews of the research literature. A resource from “What Works Wisconsin” (Huser, Cooney, Small, O’Connor, & Mather, 2009) provides brief descriptions of 14 such registries (<http://whatworks.uwex.edu/attachment/EBRegistriesAug-2009.pdf>) covering a range of areas including substance abuse and violence prevention as well as the promotion of positive outcomes such as school success and emotional and social competence. The identification of programs and practices that “work” and assessing the quality and quantity of the evidence are important for

building confidence about outcomes. We need to understand the rigor and the outcomes of the research because we need to invest in “what works”. But we also need to define and understand the core components that make the “what” work.

Operationalizing Programs and Their Core Components

Defining a program and its core components matters because practitioners do not use “experimental rigor” in their interactions with those they serve; they use programs. Thus, the lack of adequately defined programs with well-operationalized core components is an impediment to implementation with good outcomes (Hall & Hord, 2006). Since the research literature, with the predominant focus on rigor and outcomes, is not yet a good source for defining programs and the attendant core components, what processes can help? And what defines a well-operationalized program?

To be useful in a real-world service setting, any new program, intervention, or innovation, whether evidence-based or evidence-informed, should meet the criteria below. When the researcher and/or program developer has not specified these elements, then funders, policy makers, and implementing agencies, with the guidance of researchers and program developers, will need to work together to do so. This means allowing the time and allocating the resources for this important work to occur before and during initial implementation of the innovation as it moves from research trials into typical service settings.

With the use of evidence-based and evidence-informed innovations in mind, we propose that the following elements comprise a well-operationalized program including the core components:

- Clear description of the context for the program.
 - This means that the philosophical principles and values that undergird the program are clearly articulated. Such principles and values (e.g., families are the experts about their children, children with disabilities have a right to participate in community and school life, culture matters, all families have strengths) provide guidance for intervention decisions, for program development decisions, and for evaluation plans. If they are a “lived” set of principles and values, they promote consistency and integrity; and they serve as a decision-making guide when the “next right steps” with a child or family are complex or unclear, even when the core components are well operationalized.
 - The context of the program also includes a clear definition of the population for whom the program is intended. Without clear inclusion and exclusion criteria and the willingness to apply these criteria, the core components will be applied inappropriately or will not even be applicable.
- Clear description of the core components. These are the essential functions and principles that define the program and are judged as being necessary to produce outcomes in a typical service setting (e.g., use of modeling, practice, and feedback to acquire parenting skills, acquisition of social skills, and participation in positive recreation and community activities with non-deviant peers).
- Description of the active ingredients that further operationally define the core components.

- One format and process for specifying the active ingredients associated with each core component involves the development of practice profiles. Practice profiles are referred to as innovation configurations in the field of education (Hall & Hord, 2011). In the context of a practice profile, the active ingredients are specified well enough to allow them to be teachable, learnable, and doable in typical service settings. Well-written practice profiles help promote consistent expectations across staff.

● A practical assessment of the performance of the practitioners who are delivering the program and its associated core components.

- The performance assessment relates to identifying behaviors and practices that reflect the program philosophy, values, and principles embodied in the core components, as well as the active ingredients/activities associated with each core component and specified in the practice profiles. Assessments are practical and can be done routinely in the context of typical service systems as a measure of how robustly the core components are being utilized.
- A useful performance assessment may comprise some or all of the fidelity assessment process, and across practitioners should be highly correlated with intended outcomes. Over time the researchers, evaluators, and program developers can correlate these performance assessment measures with outcomes to determine how reliable and valid they are. When higher fidelity is associated with better outcomes, there is growing evidence that the program is more effective when used as intended.

Usability Testing to Operationalize and Validate Core Components

Researchers and program developers should provide information to enable agencies to support practitioners to implement a program with fidelity. The vast majority of programs (evidence-based or evidence-informed), as noted earlier, do not meet these criteria. For the evidence-based and evidence-informed interventions that have not been well-operationalized (Hall & Hord, 2011), there is a need to employ usability testing to verify or elaborate on the program's core components and the active ingredients associated with each core component before proceeding with broader scale implementation.

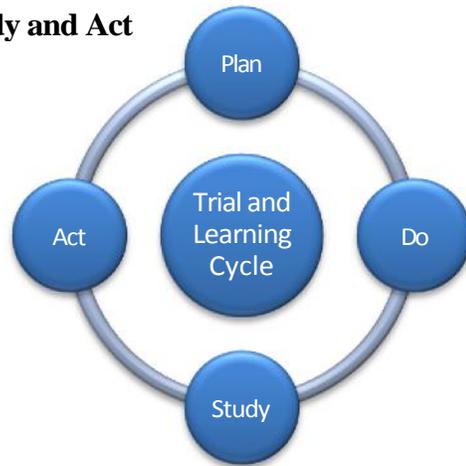
What is usability testing? Usability testing is an efficient and effective method for gaining the experience and information needed to better operationalize a program and its core components. Usability testing methods were developed by computer scientists as a way to de-bug and improve complex software programs or websites. Usability testing (e.g., Nielsen, 2005) employs a small number of participants for the first trial, assesses results immediately, makes corrections based on those results, and plans and executes the next, hopefully improved, version of the core component and its associated active ingredients. This cyclical process is repeated (say, 5 times with 4 participants in each iteration for a total $N = 20$) until the program is producing credible proximal or short-term outcomes related to the tested core components and the associated active ingredients.

Usability testing is an example of the Plan, Do, Study, Act (PDSA) cycle (e.g., Shewhart, 1931; Deming, 1986). The benefits of the PDSA cycle in highly interactive environments have been verified through evaluations across many domains including manufacturing, health, and

substance abuse treatment. This “trial and learning” approach allows developers of complex programs and those charged with implementing them to identify the core components and active ingredients of a program and further evaluate, improve, or discard non-essential components. Usability testing often is done in partnership with the program developers, researchers, and early implementers of the program.

An example of usability testing may provide more clarity about the utility of such an approach.

Figure 2. Plan, Do, Study and Act



A home-based intervention for parents whose children have just been removed due to child welfare concerns might include a small test of the degree to which the core component of “engagement” and the associated active ingredients during the initial visit (e.g., the therapist expresses empathy, asks parents to identify family and child strengths, allows the parents to tell their story) are associated with parents “willingness” to engage with the therapist.

Measures of engagement might include the number of times the family is at home at the scheduled time for visits and the number of sessions in which the parents agree to participate in parent training activities guided by the therapist. Such information can be collected very efficiently from supervisors and/or therapists. The results from the first cohort of trained therapists as they interact with families might then be assessed after three visits are scheduled and therapeutic interventions are attempted during each visit. The data, both process and outcome, are then reviewed and, if the a priori criteria are met (e.g., 75 percent of families allow the therapists into their homes for all three visits; 80 percent of families participate in the parent training activities), the same engagement processes are continued by new therapists with new families and by current therapists with subsequent families. Or, if results are not favorable, improvements in engagement strategies are made and operationally defined. Changes are made in the protocol and the process begins again. That is, new and current therapists receive additional material, training, and coaching regarding revised engagement strategies to be used during initial interactions. The revised engagement process is then tried with a second cohort, again including proximal measures of engagement. Such usability testing may occur throughout the implementation of a new program. Some program components may not occur until later in the course of the intervention (e.g., procedures related to reintegration of children into their families).

Because this is a new way of work, there can be concerns related to the cost and feasibility of usability testing. While effort and organization are required, this is not a research project but a “testing” event that can be managed efficiently and effectively. The costs of maintaining program elements that are not feasible or are not yielding reasonable proximal results can be far greater than costs associated with making time to target key elements for usability testing. And, while not all core components are amenable to such testing (e.g., use of x# of sessions), this “trial and learning” process does create the opportunity to efficiently refine and improve important elements of the “program” and/or its core components and active ingredients with each iteration. Each small group is testing a new and, hopefully, improved version. Each iteration results in incremental improvements and specificity until the outcomes indicate that the program or the tested set of core components is ready to be used more systematically or on a larger scale and is ready to undergo more formal fidelity assessment and validation.

Why Is It Important to Identify Core Components?

The lack of description and specification of the core components of programs presents challenges when it comes to assessing whether or not a given program has been or can be successfully implemented, effectively evaluated, improved over time, and subsequently scaled up if results are promising. This means that, when agencies and funders promote or require the use of evidence-based programs that are not well-operationalized, and agencies and practitioners are recruited to engage in new ways of work, there can be a great deal of discussion and confusion about just what the “it” is, that must be implemented to produce the hoped for outcomes.

Benefits of increased attention to the definition and measurement of core components and their associated active ingredients include an:

- Increased ability to focus often scarce implementation resources and supports (e.g., resources for staff recruitment and selection, training, coaching, fidelity monitoring) on the right variables (e.g., the core components) to make a difference.
 - Increased likelihood of accurately interpreting outcomes and then engaging in effective program improvement strategies that address the “right” challenges.
 - Increased ability to make adaptations that improve fit and community acceptance, without moving into the “zone of drastic mutation” (Bauman, Stein, & Ireys, 1991).
 - Increased ability to engage in replication and scale-up while avoiding program “drift” that can lead to poor outcomes.
- Increased ability to build coherent theory and practice as common core components emerge that are associated with positive outcomes across diverse settings and/or programs.

These benefits are elaborated below.

Application of implementation supports to ensure and improve the use of core components.

When core components are more clearly defined, implementation supports can be targeted to ensure that the core components and their active ingredients come to life as they are used in everyday service settings. As noted in the in-home services example above, the usability testing

approach not only allows for repeated assessments and improvements in the intervention, but it also creates opportunities for improving the implementation supports – the “execution” part of usability testing. That is, each round of improvement allows for adjustments in implementation supports such as training, coaching, and the performance assessment process itself (e.g., did we execute these activities as intended?), as well as serving as fodder for further defining and the core components and active ingredients themselves.

As noted above, usability testing is a variant of the Plan, Do, Study, Act process (PDSA). PSDA cycles and implementation supports are typically rapid cycle processes to ensure that you are getting proximal outcomes. When applying a usability testing process to an incompletely operationalized evidence-based program or to an evidence-informed program, the “plan” can be to test a segment of the program or test one or more core components as intended to be used in practice. To carry out the “do” part of the PDSA cycle, the “plan” needs to be operationalized and grounded in best evidence. That is, who will say or do what activities, with whom, under what conditions to enact the plan? And to what degree are these core components and/or active ingredients supported by evaluation and research findings? This attention to the “plan” compels attention to the core components and active ingredients.

The “do” part of the PDSA cycle provides an opportunity to specify the implementation supports required to enact the plan. How will the confidence and competence of practitioners to “do” the plan be ensured? This requires attention to the implementation supports; such as the recruitment and selection criteria for staff, as well as training and coaching processes (e.g., who is most likely to be able to engage in these activities; what skill-based training is needed to “do” the “plan”; how will coaching be provided to improve practitioners’ skills and judgment as they execute the “plan?”). And the “study” portion of the PDSA cycle requires creating an assessment of performance (e.g., did practitioners “do” the plan? were our implementation supports sufficient to change practitioner behavior?), as well as the collection of proximal or near-term outcomes (e.g., were parents at home? were parents willing to engage in practice sessions with the therapist?).

As three or four newly trained staff begin providing the new services, the budding performance assessment measures can be used to interpret the immediate outcomes in the “study” part of the PDSA cycle (e.g., did we do what we intended?; if so, did doing what we intended to do result in desired proximal outcomes?). Without proximal outcomes, distal outcomes are much less likely. Once the results from the “study” segment of the cycle are known (e.g., from performance assessment data and outcomes for participants), work can commence to “act” on this information by making adjustments to segments of the program, the core components, and/or to particular active ingredients. And further action can be taken as implementation supports are adjusted for the next group of staff as the usability testing cycle begins (e.g., Fixsen, Blase, Timbers, & Wolf, 2001; Wolf, Kirigin, Fixsen, Blase, & Braukmann, 1995). The “act” portion of the cycle defines the improvements to be made and initiates a new PDSA cycle related to the improvements related to training, coaching, and feedback systems to improve practitioner competence and confidence and adherence to the new, revised processes.

These brief descriptions of usability testing and implementation supports have focused on identifying and developing the core components for an initial effective working example of an

evidence-informed innovation or to develop an improved definition of an evidence-based program that has not been well operationalized. But even a well-operationalized intervention will continue to evolve as new situations are encountered and more lessons are learned about how to better operationalize core components, improve implementation supports, improve fidelity, and improve outcomes. The goal is not to “do the same thing” no matter what, just for the sake of “doing the program”. The goal is to reliably produce significant benefits, with better outcomes over time and to clearly identify, understand and skillfully employ the core components that are associated with better outcomes.

Interpreting Outcomes and Improving Programs. Identifying the core components that help to create positive outcomes, and knowing whether or not they were implemented with fidelity, greatly improves the ability to interpret outcomes (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). In addition, it reduces the likelihood of “throwing the baby (the new program) out with the bath water (poor implementation)”. Without understanding and monitoring the use of the core components, it is difficult to tell the difference between an implementation problem and an effectiveness problem. This is particularly problematic when positive outcomes are not achieved or when outcomes were not as beneficial as expected. Because strategies for improving effectiveness are different from strategies for improving fidelity and the implementation of the core components, it is important to be able to assess whether the program does not work or whether the implementation of the program was flawed. The following table illustrates the types of improvement strategies or subsequent actions that may be useful depending on the where one may “land” with respect to fidelity and outcomes.

Table 1. Analyzing data related to both fidelity assessments and outcomes helps to identify the actions needed to improve outcomes.

	High Fidelity	Low Fidelity
Satisfactory Outcomes	Continue to monitor fidelity and outcomes Consider scale-up	Re-examine the intervention Modify the fidelity assessment
Unsatisfactory Outcomes	Select a different intervention Modify the current intervention	Improve implementation supports to boost fidelity

Obviously, we want our efforts to “land” in the quadrants that involve achieving satisfactory outcomes. When there are satisfactory outcomes and fidelity is high, then continued monitoring of fidelity and outcomes helps to ensure that the core components are continuing to be used with good effect. And it may indicate that the program should be reviewed for scalability or increased reach since the core components appear to be well-operationalized and the implementation supports seem to be effective in producing high fidelity.

When satisfactory proximal and/or distal outcomes are being achieved but fidelity is low or lower than expected, it may require re-examining the intervention to determine if there are additional core components or active ingredients that have not been specified. This requires qualitative and quantitative data collection and analysis of the strategies used by practitioners

who are positive outliers (e.g., achieving good results but with low fidelity). Or it may be that the context for the program has changed. For example, there has been a change in the population (e.g., different presenting problems, different age-range), leading to the need to provide very different program strategies to meet the needs of the population. Or it may be that there are core components and active ingredients that are well operationalized and are being trained and coached, but are currently not included in the fidelity assessment process. In such cases, revising and re-testing the fidelity assessment may be called for. In any event, discovering the source of this discrepancy will be important if the program is to be sustained over time or scaled-up.

The combination of high fidelity but unsatisfactory outcomes may indicate that the selected intervention or prevention program is not appropriate for the population or does not address critical needs of the population. Since the purpose of using programs is to achieve positive results, the achievement of high fidelity with poor outcomes produces no value to the population in need. Such findings may help build theory and set future research agendas and hopefully would result in communities choosing to invest resources differently. Once unmet needs are identified through data gathering and analysis, it may be possible to modify the intervention and add in core components that have theory and evidence to support their impact on the unmet needs. Or it may be that the selection process for the intervention was flawed or that the population being served is different from the population identified during the original needs assessment. In any event, the search for programs with core components that address the needs of the population may need to be re-initiated.

If outcomes are unsatisfactory and fidelity is low, then the first approach is to improve or modify implementation supports (e.g., more targeted staff recruitment and selection, increased skill-based training, and frequency and type of coaching) in order to improve fidelity (Webster-Stratton, Reinke, Herman, & Newcomer, in press). Or it may be necessary to review the organizational factors (e.g., time allocated for coaching, access to equipment needed for the intervention) and systemic constraints (e.g., licensure requirements that limit recruitment, billing constraints, inappropriate referrals) that may be making it difficult to achieve high fidelity. Making changes to address organizational and/or systems issues (e.g., funding, licensure, billing) often require considerable time and effort. Therefore, the implementation supports of selection, training, and coaching may need to “compensate” for the organizational and systems barriers (Fixsen et al., 2005). For example, it may take time to address the funding constraints that make it difficult to fund coaching of staff. While attempts to fund the coaching are being pursued, it may be necessary to use more rigorous selection criteria to recruit more experienced staff or provide increased training to “compensate” for the impact of funding on the provision of coaching.

In summary, this table brings home the point that both knowledge and measurement of the presence and strength of the core components (e.g., through fidelity and other measures), are required to interpret and respond to outcome data.

Making adaptations to improve “fit” and community acceptance. There may be a variety of reasons that adaptations are considered by communities and agencies as they implement programs and innovations. There may be a perceived or documented need to attend to cultural or linguistic appropriateness or community values (Backer, 2001; Castro, Barrera, & Martinez,

2004). Or there may be resource or contextual constraints that result in decisions to adapt the program or practices. Perhaps the workforce available to implement the program influences making programmatic adaptations that are perceived to be better aligned with the background, experience, and competencies of the workforce.

Adapting evidence-based programs and evidence-informed innovations may make it more likely that communities will make the decision to adopt such programs and innovations (Rogers, 1995). However, improving the likelihood of the decision to adopt through adaptation does not necessarily mean that those adaptations in the service settings will help to produce positive outcomes. While some initial adaptations are logical (e.g., translation to the language of the population, use of culturally appropriate metaphors), recommendations by some program developers are to first do the program as intended and assess both fidelity and outcomes. Then, based on data, work with program developers and researchers to make functional adaptations. Functional adaptations are those that a) reduce “burden” and “cost” without decreasing benefits, or b) improve cultural fit, community acceptability, or practitioner acceptance while maintaining or improving outcomes. Adaptations are much more likely to be functional when the core components and the associated active ingredients are known. In addition, those engaged in adapting programs and practices must understand the underlying theory base, principles, and the functions of the core components so that adaptations do not undermine the effectiveness of the program. Finally, process and outcome data must be collected to validate that the adaptations meet the criteria for “functional”. It then stands to reason that adaptations are most likely to be functional when: the core components are well-operationalized, when implementation supports are able to reliably create competent and confident use of the intervention, and when adaptations are made in partnership with the original program developer and researcher to avoid moving into the “zone of drastic mutation” (Bauman, Stein, & Ireys, 1991) and destroying the effectiveness of the intervention; and when data verify that the changes have not undermined the effectiveness of the program or practice (Lau, 2006).

As program developers and researchers work with diverse communities, cultures, and populations to make adaptations, they may look for ways to change “form” (e.g., time, place, language, metaphors used) to improve appropriateness and acceptability while preserving the “function” (e.g. the processes that relate to effectiveness) of the core components. Collecting data to analyze the impact of making cultural adaptations is key to determining when such adaptations are functional since reducing the dosage of the core components or altering them can result in adaptations that reduce positive outcomes, as noted by Castro et al. (2004). For example, Kumpfer, Alvarado, Smith, and Bellamy (2002) describe a cultural adaptation of the Strengthening Families Program for Asian Pacific Islanders and Hispanic families that added material on cultural and family values but displaced the content related to acquiring behavioral skills – a core component. This resulted in less improvement in parental depression and parenting skills, as well as less improvement in child behavior problems than the original version, which focused only on behavioral skills.

Cultural adaptations can be made that enhance acceptability but that do not undermine the core components and active ingredients of the evidence-based program. A cultural adaptation of Parent Child Interaction Therapy (PCIT) was developed by McCabe and her colleagues (McCabe, Yeh, Garland, Lau, & Chavez, 2005). They made modifications to the core

component of engagement by including engagement protocols for immediate and extended family members to reduce the likelihood of lack of support undermining treatment. They also “tailored” the manner that certain active ingredients were framed when the results of a parent self-report questionnaire detected elements at odds with parenting beliefs. For example, for parents who expressed a commitment to strict discipline, the active ingredient of “time out” was re-framed as a punitive practice by using terms such as “punishment chair” for the time out location. Or if Mexican American parents of young children expressed concerns about the practice being too punishing for young children, the term “thinking chair” was adopted. This left the function of the time out process intact (e.g., brief removal from positive reinforcement) while tailoring or adapting the form to fit the cultural and familial norms.

Lau (2006) makes the case for selective and directed cultural adaptations that prioritize the use of data to identify communities or populations who would benefit from adaptations and are based on evidence of a poor fit. Lau makes the case for focusing on high priority adaptations that avoid fidelity drift in the name of cultural competence. In short, the process of adaptation needs to be based on empirical data and demonstrate benefits to the community or population.

In summary, modifications to core components must be done thoughtfully and in partnership with program developers and researchers, so that the underlying theory-base of the program is not inadvertently undermined. Data-based decision-making should guide modifications to core components. Linguistic adaptations aside, an implementation process that first implements the core components as intended and then analyzes results may be better positioned to make functional adaptations. Functional adaptations are those that are developed in order to improve fit, acceptability, and/or reduce burden or cost while improving outcomes or at least maintaining positive outcomes while avoiding negative impact.

Improving the success of replication and scale-up efforts . As David Olds (2002) noted, “Even when communities choose to develop programs based on models with good scientific evidence, such programs run the risk of being watered down in the process of being scaled up” (p. 168). Of course, understanding whether or not a program has been “watered down” requires an understanding of the core components and their relationship to achieving desired outcomes. Michie et al. (2009) noted that clear definitions of the required core components increase the likelihood that programs and practices can be successfully introduced in communities and scaled-up over time. However, it takes time and a number of closely controlled and monitored replication efforts by the developers to first stabilize the intervention before making the decision to attempt to more broadly scale-up the program. From the business arena, Winter and Szulanski (2001) note that, “The formula or business model, far from being a quantum of information that is revealed in a flash, is typically a complex set of interdependent routines that is discovered, adjusted, and fine-tuned by “doing” (p. 371).” Such fine-tuning can be done through usability testing, evaluation, and research. Scaling up too soon can lead to a lost opportunity to adequately develop, specify, and reliably produce the core components that lead to effectiveness.

Successful replication and scale-up are significantly enhanced when the core components are well specified and when effective implementation supports are in place to promote the competency and confidence of practitioners, and when organizational and systems change occurs to support the new way of work. Effectiveness and efficiency of replication and scale-up also

may be improved when there is greater clarity about the non-core components that can be adapted to fit the local circumstances including culture, language, workforce, and economic or political realities. And, as noted above, efficiency is enhanced when resources for implementation supports (e.g., training, coaching, data systems, fidelity measurement and reporting) are targeted to impact core components.

Implications

Given the importance of identifying core components, what are the implications for research agendas, program development, funding of service initiatives, and policy making, as well as for implementation in typical service settings. Research that focuses on operationalizing, measuring, and testing the efficacy of the independent variables (e.g., the core components) would improve our understanding of “what works” and what is necessary for evidence-based programs and practices to produce outcomes. At present, research standards, publication constraints, and journal requirements for publication do not significantly support or encourage such detailed attention to core components. Michie et al. (2009) argue that, “If a more explicitly theoretical approach to deciding how to design and report interventions were taken, it may be that more effects may be revealed and more understanding of their functional mechanisms gleaned....promoting the understanding of causal mechanisms that both enrich theory and facilitate the development of more effective interventions”. They also argue that the use of the web for publishing allows for the publication of detailed intervention protocols, which would further improve the identification, operationalization, and testing of core components.

Funders of demonstration programs and pilots can further support the development of and attention to core components by including requirements to specify the underlying theoretical bases and the definition of interventions as deliverables at the end of the demonstration or pilot phase. Such attention then might see demonstrations and pilots as the launching pad for replications and scalability and the first in a series of development steps rather than islands of excellence that come and go.

As communities, agencies, and government entities turn to evidence-based programs and practices and evidence-informed innovations to address specific needs, they, too, can promote increased attention to the importance of well-defined core components. By asking program developers about fidelity measures, research related to fidelity measures, the rationales for core components, and the description of intervention core components, they can discern which programs and practices are more likely to be ready for use in their communities. In addition, they serve notice to program developers who intend to be purveyors (Fixsen et al., 2005) that such information may be an important deciding factor when communities and agencies select interventions or prevention programs.

Similarly, policy makers need to be aware that providing funding for evidence-based programs and practices needs to be coupled with attention to the degree to which such programs’ core components are defined, operationalized, and validated. Failure to have both identified program models and well-specified core components can lead to significant implementation and sustainability challenges. If the intervention is poorly specified and performance assessment (fidelity) measures do not target functional core components, then achieving outcomes may not be realistic. Similarly, policy makers need to support and require continued attention to fidelity

and outcome assessments in order to maintain and improve service outcomes over time and across practitioners and leadership changes. This requires funding for the infrastructure needed to collect and use data. Resources to collect, analyze and interpret data are as important as the skills of the practitioner for achieving, interpreting, and improving outcomes. At present, core components and research done related to them are not targeted by registries, or clearly cited; and in some cases, you can even find research studies related to components, but not in a systematic way or highlighted as such. This representation gap requires systematic and sustained attention.

In summary, defining, operationalizing and measuring the presence and strength of core components are important if we are to improve our knowledge about “what works” and understand how to implement with benefits in everyday service settings.

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Function-Based Thinking: A Systematic Way of Thinking About Function and Its Role in Changing Student Behavior Problems

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The responsibility of managing student behavior has become a heightened concern for general education teachers as a result of increased accountability for student gains. Although functional behavioral assessments (FBAs) are widely recommended for use in such situations, there are clear indications that this evidence-based practice is not occurring regularly or reliably (e.g., McIntosh, Horner, Chard, Dickey, & Braun, 2008; Scott et al., 2004). Nevertheless, there are core elements of FBAs that promote function-based thinking (FBT) that may help bridge this gap and serve as an efficient strategy to address behavior problems and inappropriate referrals.

This article outlines the FBT model, which aims to empower general education teachers and school-based personnel to apply a more systematic approach to problem-solving possible functions of student behavior. Special education teachers are often tapped to provide support to general education teachers when students with special needs are included in the general education setting. FBT is an approach to behavior intervention planning that can be more easily embraced by general education teachers than FBA. Drawing on the FBA literature (Carr et al., 1999; Sugai et al., 2000; Sugai, Horner, & Sprague, 1999), the FBT model provides a framework for systematically exploring possible conditions that might be contributing to the student's misbehavior. After describing the core elements and merits of FBAs, as well as the factors (e.g., setting demands) that impede consistent use in schools, we offer a rationale for FBT and a case study

illustrating how it can be implemented by general education teachers. We conclude with a discussion of the professional development and coaching that is necessary to support high-quality implementation of FBT.

FBA: The Traditional Approach

Although only 1% of students are identified as having a severe emotional disturbance (U.S. Department of Education, 2006), it is estimated that between 3% and 6% of the student population in public schools exhibits behaviors significant enough to warrant some type of special education services for challenging behavior. Additionally at least 5% of children have serious mental health needs, for which only a small fraction receives services (U.S. Department of Health and Human Services, 2001). These statistics demonstrate the need for general education teachers to be familiar with the principles of FBA and behavior intervention plan (BIP) development. However, FBA has been historically used in clinical settings to determine the antecedents and reinforcers of severe behaviors demonstrated by individuals with significant cognitive and developmental delays (Payne, Scott, & Conroy, 2007). Moreover, FBA was performed by professionals skilled in applied behavior analysis (ABA) and under controlled clinical conditions. To date, there has been relatively little research documenting its effectiveness when conducted by school staff outside of research projects (Payne et al., 2007). Additionally, there are a limited number of school-based professionals trained in the complexities of FBA.

The resource and time constraints placed on school systems limit the opportunity for the development of a complex FBA for students outside of the special education domain (Asmus et al., 2004).

In an effort to increase the use of FBAs, the reauthorizations of Individuals with Disabilities Education Act (IDEA) in 1997 and 2004 mandated the use of FBAs and positive behavioral supports for students with disabilities whose behaviors could potentially result in a change in educational placement. Recommendations to employ FBAs and BIPs included use with students who are not identified as needing special education services. Although the legislation prompted the use of FBAs and BIPs, it provided no technical assistance to guide school personnel in appropriate development and implementation. An additional concern is the presumptive nature of this recommendation, as the research is mixed regarding the importance of determining function in behavior management strategies for general education students (McIntosh et al., 2008). Furthermore, there is limited research examining potential similarities in the functions of behavior for students exhibiting mild or moderate behavior problems and students with disabilities exhibiting more intense behavior problems. There are also growing concerns about the quality and effectiveness of FBAs and BIPs developed by often overwhelmed and budget-challenged school-based personnel, who are typically not provided opportunities to acquire ABA or functional analysis skills (Quinn et al., 2001; Scott et al., 2004). Thus, schools are mandated to

execute FBAs in the absence of research-based processes and guidance specific to the school setting and with limited evidence of the effectiveness of FBAs developed by teachers (Payne et al., 2007).

Along with increased pressure to conduct FBAs, there is greater emphasis on the prevention of student behavior problems through effective management of behavior problems in the classroom. Educators are forced to focus a majority of their contact time with students strictly on academics, which leaves little time to manage problematic behaviors and teach prosocial replacement behaviors (Greenberg et al., 2003). Although students exhibiting problematic behaviors need explicit instruction in replacement behaviors (Kauffman, Lloyd, Baker, & Reidel, 1995), behavioral instruction and management are not heavily emphasized in preservice or in-service general education teacher training (Kauffman, 2005; Reid & Eddy, 1997). In fact, general education teachers typically receive little or no training in behavior management principles and classroom management during their preservice training experience (Cook, 2002; Cook, Landrum, Tankersley, & Kauffman, 2003). A related challenge is the limited time available to provide training, support, and technical assistance to teachers, as well as limited class time for teachers to implement interventions (Domitrovich et al., 2008). Demands on teacher time increase as new initiatives are proposed, often in the absence of additional time and resources to support implementation (Sugai et al., 2000).

Rationale for FBT

FBT is intended to address the call for function-based behavior planning by providing a framework for helping teachers think about problematic behaviors. FBT is intended to be efficient and minimally invasive in terms of teacher time, cost, and

management efforts. When executed well, the use of FBT will likely result in a time savings for teachers and administrators. The initial investment in training reaps rewards as a teacher's ability to consider function is enhanced. Responding at the classroom level minimizes the need to spend time outside of the classroom attending numerous behavior support meetings. Furthermore, using FBT as a precursor to FBA permits preventive interventions to be implemented prior to making a referral to the often backlogged school-level student support teams. FBT is an attractive prevention approach, given the time constraints, limited training in FBA, and uncertainty about the match between functional analysis and use with general education students.

Research suggests that the earlier intervention is provided for new-onset behaviors, the more effective the behavioral change efforts. When intervention is not provided, student behavior problems escalate and require more intensive intervention (Scott et al., 2005). Therefore, if teachers are able to apply FBT to behavioral concerns in the classroom as behaviors develop, they will be better prepared to prevent the development of more serious behaviors. Such an approach is proactive and contrasts typical school procedures, which require teachers refer students with problem behaviors and then wait for district-level support from a behavior specialist. When a teacher is trained to apply FBT to a problem within his or her class, he or she is able to explore what could be changed in the student's school environment more immediately and ensure there are not stimuli within that setting that are contributing to student problem behaviors. Thus, using FBT as a preventative strategy allows teachers to implement programs prior to referral for special education and

possibly avoid the development of more serious problems.

Overview of FBT

FBT is a model for thinking and a systematic process for defining problem behaviors and selecting interventions that match the function of the behavior. It addresses both the importance of identifying the function of behaviors and the significant role general education teachers can play in that identification process. At the same time, FBT takes into consideration the setting demands placed on general educators. The model incorporates the function of a student's behavior problem when planning behavioral interventions and considers the role "function" plays in the selection of those interventions. FBT adheres to the basic principles of FBA: a hypothesis statement that depends on the development of an operational definition of the behavior, information gathering that includes direct observation (primarily by the classroom teacher), and the creation of a behavior support plan that aligns with the determined function (Sugai et al., 2000). Because FBT does not require the level of expertise and depth of assessment that FBA does, it is more accessible and user-friendly for teachers.

FBT is designed to serve the needs of students who have behavior problems that have not yet evolved to the point of requiring multiple layers of intervention to support success. Training in FBT helps teachers consider the function of students' behavior problems and plan interventions accordingly. This, in turn, has the potential to decrease referrals to the student support team, typically the group of professionals who work collectively to solve persistent academic and behavioral issues. When teacher interventions reduce student referrals to the

Figure 1 COMPARISON OF FBA AND FBT

Differences between FBA and FBT	
Functional Behavioral Assessment (FBA)	Function-Based Thinking (FBT)
<ul style="list-style-type: none"> • A process and a product • Requires formal assessment and analysis of comprehensive data • Involves multiple team members • Requires individual trained in behavior analysis or functional assessment • Typically a lengthy and intensive assessment and intervention process • Not often used as a preventative measure, but rather instituted when more problematic behaviors arise 	<ul style="list-style-type: none"> • A quick systematic way of thinking that informs the selection of effective function-based supports • A preliminary step, prior to an extensive FBA • Only requires the teacher and an individual knowledgeable of behavior management to facilitate the learning process for teachers • Draws from the research-based components of FBA • Designed to be used as an early intervention strategy with mild to moderate behavior problems • Designed to be used prior to involving the student support team or outside supports

student support team, the team can dedicate more time to support students with more intense behavioral needs. FBT is not designed as a replacement for FBA. Rather, it is intended to be a preliminary, proactive, and user-friendly examination of how student behavior problems relate to their environments (see Figure 1). The ultimate goal of FBT is for a teacher to independently think functionally about problematic student behavior and select an intervention that serves the same function without the support of multiple team meetings. Learning to think functionally follows a three-step process, which includes gathering information, developing a plan, and measuring the success of the plan. These steps are described in greater detail in the following section.

As stated previously, FBT is not intended to replace more comprehensive FBA. FBA should still be carried out when student behaviors are more complex or have been exhibited for an extended

amount of time. FBA could also be used when the behavior plan created from FBT does not prove to be effective at changing newly acquired problem behaviors.

The Three Steps of FBT

Gathering Information

The first step of FBT requires the gathering of information or data about the presenting behavior. Any information that helps school personnel explore the nature of the presenting problem behavior is collected. Collecting antecedent, behavior, consequence (A-B-C) data may bring to light the cause of the behavior. Keep in mind that the antecedents of behavior might occur outside of the school day, with a delayed behavioral response. Collecting A-B-C information can help reveal these and other specific patterns of behavior, triggers, and responses that may be reinforcing the behavior. A-B-C data also serve to

clarify teacher and student responses that may be consciously or unconsciously rewarding the behavior.

There are many kinds of data that are collected naturally in the course of the school day. Examples of these include student grades, homework and work completion, tardies, absences, and even visits to the nurse or guidance office. All of these can help provide insight into student behavior. These data typically are collected independently, and thus they are rarely looked at collectively or comprehensively. The cause of the behavior is much clearer as a result of gathering numerous sources of data and reviewing them collectively. Teachers are becoming more astute at using data to make academic decisions. The same rationale applies to behavior and helping a teacher

learn to review data for behavioral intervention planning is just as critical. Thus, FBT promotes the systematic examination of existing data and is not always dependent upon the collection of new sources of information. Through this process, teachers begin to think functionally about the causes of students' misbehavior and the most appropriate interventions.

Developing a Plan

The second step of FBT is the development of a plan that supports behavior change. The plan should take into consideration the function of the behavior. Development includes creating a plan to replace the targeted behavior with a goal behavior that is more suitable for the given setting. The plan should also identify personnel that could help the student learn the new behavior as well as reinforce the student for demonstrating the new behavior. This may require that personnel be trained or guided so that all of the adults understand the expectations of the plan and respond consistently to the student. Although often overlooked, it is critical to share the student behavior plan with other school staff who are not directly involved with implementing the plan but who have regular interactions with the student. Key personnel would naturally include all of the student's teachers but may also include front office personnel, the school nurse, the lunchroom staff, and bus drivers. Because the success of the plan is dependent upon adult behavior change, it is critical to include all adults who regularly interact with the student in the development of a consistent system of support.

Measuring the Success of the Plan

The third step in FBT is to determine how the plan will be evaluated for success. Building on the first step of gathering data prior to implementation of the plan, the data collection should be ongoing and

periodically compared with the baseline data to determine student progress. The data collection strategy needs to be simple and efficient for the teacher to implement while still teaching a class. A sample worksheet and flowchart that further explain the FBT process are included at the end of this article (see Figure 2 and Figure 3).

Applying FBT in the Classroom Context

Examination of student behavior should start with the consideration of ecological factors that include instructional match, classroom environment, and cultural sensitivity. Ecological models highlight the connection between the learning environment (and context) and student behavior and development (Bronfenbrenner & Morris, 1998; Hobbs, 1982; Sheridan & Gutkin, 2000). One such context is the classroom, which has considerable influence on both the students' and teachers' behavior (Koth, Bradshaw, & Leaf, 2008). When student behaviors become problematic it is imperative that cultural context and teacher behaviors are considered, as both are dimensions of the student's environment.

Given the influence that teacher behavior and cultural factors have on student performance, when faced with problematic student behavior it is critical to determine the degree to which these factors may be contributing to the problem. Because classroom management and cultural competence are sensitive issues to a teacher, we recommend the opportunity for teachers to self-reflect on these topics (Hershfeldt et al., 2009). Some self-assessment instruments have been designed to actively engage teachers in the self-reflection process. The Classroom-Check Up (Reinke, Lewis-Palmer, & Merrell, 2008), for example, highlights critical variables in effective classroom management and provides teachers an opportunity to

reflect on the ecology in their classroom. Likewise, the Double-Check Self Assessment (Hershfeldt et al., 2009) provides teachers the opportunity to reflect on indicators of culturally responsive classroom practices. Both instruments serve the purpose of opening a teacher's thinking to the possibility that something about his or her own behavior could be contributing to problematic student behavior.

It is also critical to determine the match between academic expectations and the student's ability to meet the expectations. The call for academic progress monitoring has helped to reduce assumptions about student ability. More often teachers are required to chart academic progress of student in comparison to grade-level expectations. However, despite best efforts to consider academic deficits, there are still instances where a student is faced with tasks that are too difficult and frustration turns into problem behavior. For example, McIntosh et al. (2008) showed that students with lower reading levels often displayed escape motivated behaviors. Teachers must carefully consider this as a possible predictor when students are demonstrating challenging behaviors. Once it has been determined that the classroom climate is supportive and promotes positive learning opportunities and that the student is able to perform the expected task, then FBT should be applied.

Helping Teachers Implement FBT

We recommend that teachers are coached through the three-step FBT protocol with the intent of fostering independent implementation of FBT in the classroom. Some teachers may need support implementing FBT with several different students in order to learn the process, whereas other teachers may learn the process after being guided through it just one time. FBT can be viewed as a skill that a teacher can acquire and use at the onset of behaviors—when interventions are most successful and

Figure 2 THE THREE STEPS OF FBT

<i>Gather Information</i>
Describe the problem behavior.
Form an operational definition of the problem behavior (i.e., targeted behavior).
What information have you gathered about the behavior? When does it occur? What happens directly before the behavior (i.e., the trigger)? What happens directly after the behavior occurs (i.e., the consequence)? Do you detect any patterns?
Hypothesize why the student may be exhibiting the problem behavior. Behaviors typically occur for a limited number of reasons; what do you hypothesize is the reason this student is demonstrating the behavior (e.g., attention seeking or avoidance)?
<i>Develop a plan</i>
If the student is trying to access attention then how can he/she get attention in a way that is acceptable in the setting?
If the student is trying to avoid a task or interaction, how can the student avoid the task (at least temporarily) that is a in the setting?
Operationally define the goal behavior you would ' <i>ideally</i> ' like the student to demonstrate?
Knowing that learning new behaviors takes time (just like with academics), what behavior would you ' <i>settle for</i> ' while the student develops mastery of the new behavior?
Is there anyone else (aside from you and the student) who could help the student learn or could reinforce the student when s/he demonstrates the new behavior?
How will you reward the student for demonstrating the new behavior (i.e., reinforcement to increase the likelihood that the behavior will happen again)?
Is there anything that will prevent the student from being successful with this plan (substitute teacher, no breakfast, peers)? How will we ' <i>pre-correct</i> ' for this ahead of time?
<i>Measuring the success of the plan</i>
How will you know if the new <i>replacement</i> behavior is happening more often? If the old problematic behavior is happening less often?

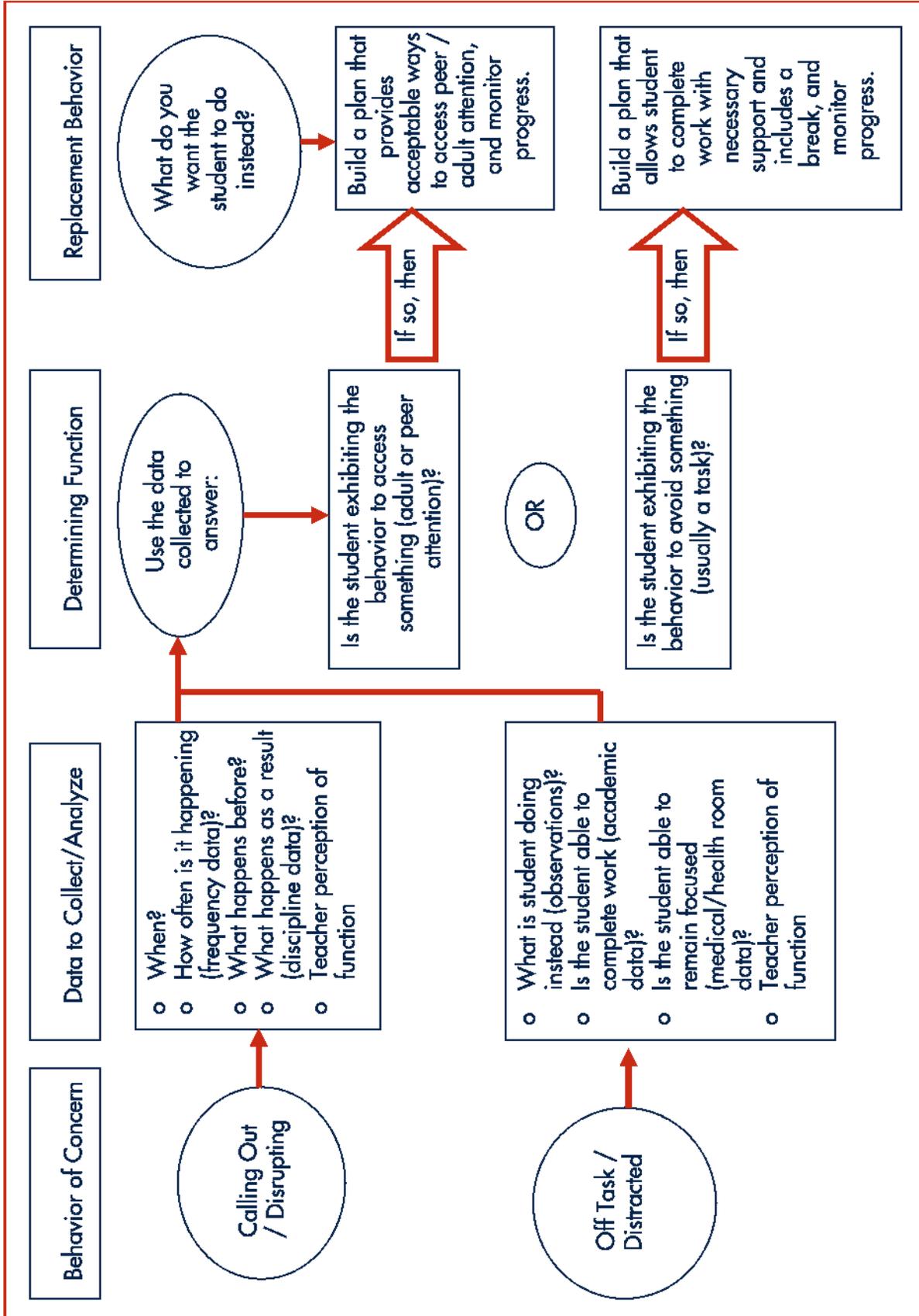


Figure 3 MODEL FOR IMPLEMENTING FBT

before behaviors intensify (Scott et al., 2005). Specifically, a teacher along with a coach or facilitator (e.g., school psychologist, colleague, or other school personnel) would begin working through the three-step FBT process. This team approach is used as a support to the teacher who is learning FBT. Once the teacher is confident in the application of FBT then there is no longer a need for a team approach unless the group chooses to maintain that format.

The second step of the FBT process aims to help teachers ask the question, *Why is the student engaging in the problematic behavior?* Oftentimes when students are misbehaving, teachers become overwhelmed and rely on whatever intervention might have worked with a previous student. However, the research suggests that selecting an intervention that addresses the function of the behavior yields higher success in changing the targeted behavior positively (Scott et al., 2005). Therefore, in showing teachers how to think about the function of the behavior they become more adept at addressing problematic behaviors. The function of the behavior would be determined by reviewing the information gathered and hypothesizing about why the student is demonstrating the behavior.

The function of the behavior should be the primary consideration when developing the plan. The purpose of the plan is to support change of the targeted behavior. When developing the plan, school personnel should consider the student's strengths and interests in addition to the student's needs. Creating a plan that supports the goal behavior with reinforcers that match a student's interests and build upon strengths will be more effective than simply focusing on the development of student deficits (Scott & Kamps, 2007). In addition to reinforcers, the plan should include instructional design, a plan for success, and a plan to prevent failure (Scott & Kamps, 2007). Instructional strategies that will be implemented to teach the

student the goal behavior should be clearly outlined. Variables that can prevent the plan from being successful should be included. These might include substitute teachers, peer conflicts, a disruptive bus ride, or even a child missing breakfast. School personnel who are considered integral in the implementation of the plan need to be notified and trained if necessary; otherwise, lack of personnel training may contribute to student failure.

Lastly, strategies for evaluating the success of the plan need to be developed. By collecting data prior to the intervention and comparing it with the data collected once the intervention begins, the effectiveness of the plan can be more clearly evaluated. Teachers are provided multiple tools for charting reading and other academic progress. Learning to think functionally involves carrying that skill into the behavioral domain. At this point, teachers may need assistance in determining what form of data to collect, how often to take data, and how to display the data so that trends and progress can be monitored. As noted previously, we recommend a simple measure so that continued collection is reasonable and can easily be carried out by the teacher. Prepared forms are ideal for the efficient collection of data. Examples of prepared reproducible data collection forms have been developed by Jenson, Rhode, and Reavis (1995) in the *Tough Kid Tool Box*.

Case Study Illustrating FBT

We consider a case example of the implementation of FBT with a student, Jay, who is a third grader in a suburban school. The teacher, Ms. L, explained that Jay was persistently calling out during instruction to the point where other students were complaining about the disruptions. The teacher decided to address the behavior because of the level of disruption. In this situation, the teacher expressed her concern to the school counselor and asked for

support. The school counselor scheduled a meeting with the teacher and one of the authors who would serve as a trainer in FBT. Thirty minutes were allowed for the meeting, and although parents were not included in this particular case they certainly could be.

Consistent with the steps outlined previously, we first interviewed the teacher, which allowed her to explain the behavior and helped her to narrow it to an operational definition (this step also typically includes an opportunity for teachers to "vent," or express frustration and get emotional support from colleagues). For example, when Ms. L. began explaining Jay's behaviors she was using words such as outbursts, blurts, and bellows. The target behavior was written in terms that could be easily understood by all school professionals who might need to access the function-based plan. At this point, the interviewer asked the teacher to explain what she observes directly before and directly after the behavior occurs. The group felt like the teacher's observation clearly represented the antecedents and consequences and the interview continued. If this had not been the case, then the team would need to explicitly collect A-B-C data. At this point, the team also reviewed other data sources that were relevant to the student behavior (e.g., office discipline referrals, class work completion grades, the nurse's log).

Next, the group created a hypothesis statement that included the perceived reason for the behavior. Simply put, the hypothesis addresses the question, "Why is the behavior occurring?" In this case, the teacher realized by reviewing her antecedent data that the behavior occurs primarily during math class on days that new content was presented. More specifically, the behavior started when Ms. L. gave the direction to begin independent practice of the new content. Ms. L.'s

response (consequence) to Jay's disruption was to deduct minutes from recess, during which time he would be required to finish the assigned task. Ms. L. also provided support on the assignment during this time.

After reviewing the data, Ms. L. realized Jay might be avoiding the assignment because he did not understand the new material well enough to complete the work independently. Therefore, by holding him for recess, she was actually reinforcing his behavior because he could access her support. Thus, it was determined that Jay was causing disruptions to avoid the independent seatwork that was too difficult for him to complete without assistance. By misbehaving, he received the teacher's help. Through determining why the behavior occurred, Ms. L. was able to identify the function of the behavior.

Once the function of the behavior was determined, a replacement behavior was defined. Identifying a replacement behavior answers the question, "What do you want the student to do instead?" It is also important that the replacement behavior serve the same function as the targeted behavior. Choosing an appropriate replacement behavior that matches the same function is a difficult skill that is not always part of a teacher's repertoire but requires training and support. Ms. L. decided that rather than disrupting class when he felt unsure of the materials, she helped Jay learn to take his paper to the back table where she met him and provided him the support he needed. Upon defining the replacement behavior, the teacher developed a plan that outlined instruction and reinforcement of the new behavior. In this case, the teacher wanted to spend additional time on the guided practice part of her lesson and developed a method for checking for Jay's understanding. She wanted to ensure that Jay felt comfortable moving ahead with the independent practice and provided him the

opportunity to move to the back table for additional help.

Finally, the team determined how to evaluate the effectiveness of the intervention. Again, the evaluation process required specific data about the problem behavior be gathered prior to intervention and again once the intervention is implemented. In this example, the teacher wanted to document the number of times Jay failed to attempt his individual seatwork prior to allowing him to visit the back table and after he was allowed to visit the back table (before and after the intervention was implemented). If the number decreased, then it would be appropriate to assume the intervention was successful (see Figure 2). The ultimate goal is for teachers to become independent at using FBT to select and implement behavioral interventions. The team model described previously characterizes a training situation.

The goal is for teachers to apply FBT when a behavior problem first arises with a student. Although employing a team of professionals is perhaps optimal, it is not always easy to pull together. While the team is trying to match schedules and consider a possible time to meet, the student's behavior can often go unaddressed. Instead, teachers trained to apply FBT possess the ability to consider function when selecting a response to student behavior problems, thereby increasing the likelihood of extinguishing the behavior.

Professional Development

An important part of the FBT process is receiving sufficient training and technical assistance in implementing the strategy. In fact, there is increased interest in the elements that are critical to the successful implementation of new practices like FBT (Fixsen, Naom, Blasé, Friedman, & Wallace, 2005). Those elements include practitioner

selection, preservice and in-service training, ongoing consultation, coaching, and staff evaluation. First, basic assumptions must be met in terms of practitioner selection; a teacher must be willing and able to perform the skills associated with FBT in order for implementation to be successful. Second, preservice and in-service training provide the necessary background knowledge and process knowledge so that teachers can grasp the relevance of the intended strategy. Ongoing consultation, technical assistance, and coaching should be provided to ensure continued progress in the implementation process. Finally, staff evaluation facilitates ongoing assessment of the implementation process. Assessing the use and outcomes of FBT provides the practitioner with self-reflection opportunities specific to the implementation of the new skill and facilitates sustainability of the intervention (Fixsen et al., 2005)

The most critical of the core implementation components is ongoing consultation and coaching. A meta-analysis on the effects of training and coaching on classroom implementation of new material revealed that 95% of participants, who received in-class coaching to support a new strategy, demonstrated mastery of knowledge and accurate skill demonstration and implemented the new strategy with fidelity. In contrast when participants received only practice opportunities and feedback as a training component, 60% demonstrated mastery of knowledge and accurate skill demonstration but only 5% actually used the new skill in the classroom (Joyce & Showers, 2002). Related research by Ager and O'May (2001) suggests that providing training without coaching has little effect on performance. Given these findings, it is clear that while training teachers to implement FBT, the coach should provide support that is collaborative rather than consultative. Coaching alongside the teacher in the classroom will yield greater outcomes than other training formats.

It is for this reason that we recommend that a coach be available to provide the necessary supports as teachers develop their functional thinking skills. As discussed previously, members of the student support team who are highly trained in behavioral modification techniques can serve as coaches at a collaborative level to ensure the teacher is demonstrating the necessary understanding and applying the correct logic when linking functional hypotheses to interventions. Coaches can facilitate the inclusion of teacher values and beliefs (Smart et al., 1979) and provide emotional support during the implementation process (Spouse, 2001).

Conclusions

Operationalizing the inventory of research-based interventions and theories in school settings requires an empathic consideration of school-based contextual factors, a common language, and one-to-one support for teachers willing to learn new technology in support of student success (Domitrovich et al., 2008). FBT is an example of how to apply the logic and theory of FBA to a wider population of students who are displaying behaviors of concern. FBT is a framework for thinking that considers the contextual needs of general education teachers and provides opportunity for these teachers to actively participate and plan behavioral interventions that will be more effective because they are selected based on function. By building the capacity of the classroom teacher to such a level, the goal then becomes application of FBT to aid in the prevention of unnecessary office referrals, student support team referrals, and ultimately unnecessary referrals for special education evaluation.

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Report on Best Practices in School Discipline



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Maryland's Tiered Instructional and Positive Behavioral Interventions and Supports (PBIS) Framework

•Academic Systems

Intensive, Individually Designed Interventions

- Address individual needs of student
- Assessment-based
- High Intensity

Targeted, Group Interventions

- Small, needs-based groups for at risk students who do not respond to universal strategies
- High efficiency
- Rapid response

Core Curriculum and Differentiated Instruction

- All students
- Preventive, proactive
- School-wide or classroom systems for ALL students

Behavioral Systems

Intensive, Individually Designed Interventions

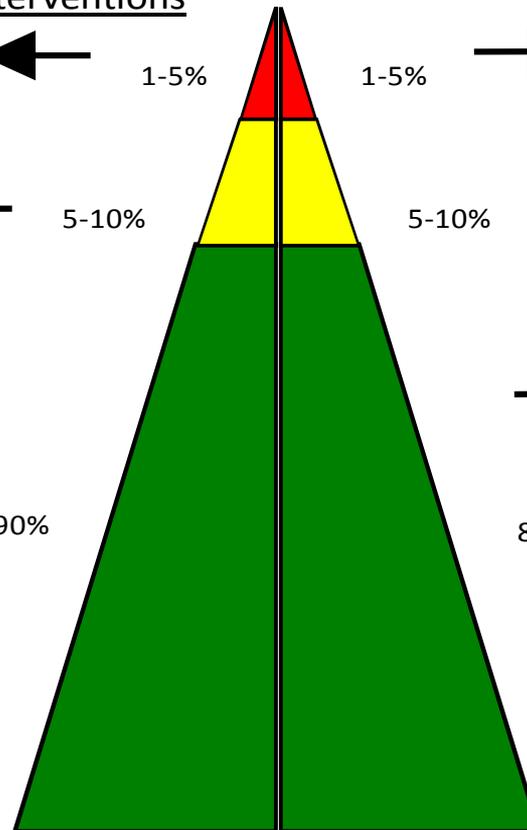
- Strategies to address needs of individual students with intensive needs
- Function-based assessments
- Intense, durable strategies

Targeted, Group Interventions

- Small, needs-based groups for at-risk students who do not respond to universal strategies
- High efficiency/ Rapid response
- Function-based logic

Core Curriculum and Universal Interventions

- All settings, all students
- Preventive, proactive
- School-wide or classroom systems for ALL students and staff



Practice: Continuum of Progressive Discipline

- Provide early, ongoing, and incremental intervention.
- Use function-based thinking to understand challenging behaviors as “teachable moments”.
- Guides and supports administrators in choosing appropriate level of response.
- Guides schools to actively engage all stakeholders in the process; students, staff, parents, families.

Training Outcomes Related to Training Components

Training Components	Training Outcomes		
	Knowledge of Content	Skill Implementation	Classroom Application
<i>Presentation/ Lecture</i>	10%	5%	0%
<i>Plus Demonstration</i>	30%	20%	0%
<i>Plus Practice</i>	60%	60%	5%
<i>Plus Coaching/ Admin Support Data Feedback</i>	95%	95%	95%

Source: Joyce and Showers, Models of Teaching 9th Edition, Student Achievement through Staff Development, 2002.

Summary and Recommendations for Research and Policy

- Utilize federal and state policies to develop local discipline policies.
- Root local policies in data-based decision-making.
- Develop discipline policies that promote teaching and learning.
- Communicate policies prior to discipline events arising.
- Engage all stakeholders before, during, and after a discipline event.

Summary and Recommendations for Practices: Multi-Tiered Systems of Support

- Focus on school-wide prevention and early intervention; multi-tiered systems of support.
- Transform punitive practices to pro-social supportive behaviors.
- Use a data system to track effectiveness of interventions.
- Consider using MDS3 School Climate Survey
- Select appropriate evidence-based practices.

Summary and Recommendations for Professional Development

- Focus on evidence-based SEL strategies to build relationships.
- Work with institutes of higher education to provide behavior management coursework and certifications.
- Support a certification track for Maryland school resource officers (SROs).
- Require school leadership to set annual climate goals with accountability measures.
- Make the establishment of school climate implementation teams a priority.
- Job embedded Professional Learning Communities that address both behavior and academics.