# Positive Behavioral Interventions and Supports

**Data Report and Summary:  A Look at Connecticut**

Winter/Spring  2010-11
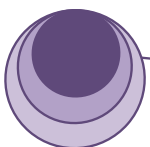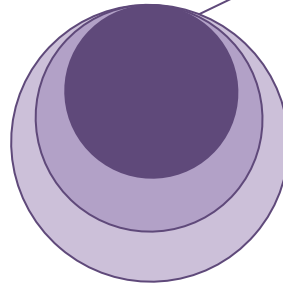
# SERC

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# DATA REPORT & SUMMARY:
## Positive Behavioral Interventions & Supports

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# Contents

*Please note:* **Some material in this report refers to "PBS," an acronym used prior to "PBIS." Each refers to Positive Behavioral Interventions and Supports.**

# Defining PBIS

## A Systems Approach to Behavior Management

Positive Behavioral Interventions and Supports (PBIS) is a behaviorally based systems approach to teaching and managing behavior. The goal of establishing a PBIS system is to enhance the capacity of schools, families, and communities to institute and maintain positive and rich school environments for all students to achieve socially and academically.

PBIS involves the application of proactive strategies for defining, teaching, and supporting appropriate student behaviors. Instead of using a piecemeal approach of individual behavioral management plans, a continuum of evidence-based approaches is maintained for all students, supported by all staff, and sustained in all areas of the school building—including the classroom and non-classroom settings (such as hallways, buses, and restrooms). The PBIS model uses a systemic approach so that otherwise isolated parts of the school operate in tandem. This school-wide approach achieves student outcomes that are magnified as a result of comprehensive and integrated implementation as opposed to addressing components of the school system in isolation.

Schools using a PBIS approach focus on creating and sustaining primary (school-wide), secondary (small group), and tertiary (individual) systems of support that improve lifestyle results (personal, health, social, family, work, recreation) for students and families [Office of Special Education Programs (OSEP): Center on Positive Behavioral Interventions and Supports, 2010]. This multi-level approach to intervention is a more comprehensive way of responding to students' behavioral needs because the focus is on layers of prevention and the logical distribution of resources.

An established and organized continuum of support allows human and fiscal resources to be redistributed to the students with the greatest need, while ensuring behavioral and social learning success for all students, including students with disabilities and English language learners. Schools achieve comprehensive student behavioral success by examining the factors that impact behavior as well as the relationship between environment and behavior. By taking a behavioral approach to school-wide discipline, schools aim to teach students that choosing undesirable behavior is ineffective and that choosing desired behavior is more functional.

PBIS also works to improve the overall school climate, decrease reactive management, maximize academic achievement for all students, integrate academic and behavioral initiatives, and address the specific needs of students with severe emotional and behavioral concerns (OSEP: Center on Positive Behavioral Interventions and Supports, 2010).

### Approach to Decision Making

When implementing a continuum of support for behavior, schools use an approach to decision making that enables teams to isolate current strengths and needs; identify appropriate practices, strategies, and/or interventions; develop appropriate staff and student supports; and monitor implementation progress. The fidelity of School-wide PBIS implementation is dependent on a team's ability to balance and use four integrated elements to formalize procedures for decision making. The four key and integrated elements are reinforced throughout the PBIS Training Series and are: *Outcomes*, *Data*, *Practices*, and *Systems* (See Figure A).

**Figure A: PBIS Integrated Elements**
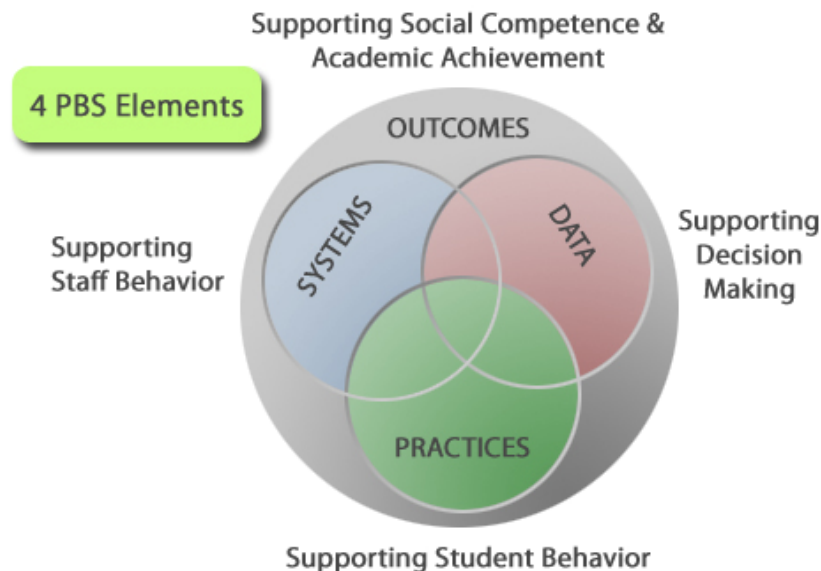


**(Source: OSEP: Center on Positive Behavioral Interventions and Supports, 2010)**

➢ **Outcomes:** academic and behavior targets that are endorsed and emphasized by students, families, and educators. (What do you want to see? What is important to each particular learning community?)
➢ **Practices:** interventions and strategies that are evidence based. (What practices could effectively, efficiently, and relevantly achieve what we want? How will you reach the goals?)
➢ **Data:** information that is used to identify status, need for change, and effects of interventions. (What do we currently see and know? What data will you use to support your success or barriers?)
➢ **Systems:** supports that are needed to enable the accurate and durable implementation of the practices of PBIS. (What needs to be in place to support (a) practice adoption that is informed and (b) full implementation that is contextualized, accurate, and sustainable? What durable systems can be implemented that will sustain this over the long haul?)(OSEP: Center on Positive Behavioral Interventions and Supports, 2010)

## PBIS Implementation at the School Level

PBIS provides the framework for implementing a continuum of evidence-based, prevention-based, behavioral practices and systems. Schools are encouraged to use practices and intervention systems that are research-validated or evidence based. The National Center on Positive Behavioral Interventions and Supports provides examples of suggested practices; however, schools may choose to continue using practices that have achieved measurable outcomes for students or staff. The National Center for PBIS synthesized the research base around school-based behavior support and organized the most appropriate, effective, efficient, and relevant of these practices into five PBIS subsystems: *School-wide*, *Classroom*, *Non-classroom*, *Family*, and *Student* (see Figure B). The *School-wide* subsystem identifies practices, processes, and systems for all students and staff members across all settings. The *Classroom* subsystem identifies practices, processes, and systems in settings in which delivery of instruction is emphasized. The *Non-Classroom* subsystem identifies practices, processes, and systems for settings and contexts in which the emphasis is on monitoring and supervision rather than instruction. These settings include sporting events, assemblies, cafeterias, hallways, buses, and

off-campus events. The *Family* subsystem identifies practices, processes, and systems for engaging and supporting family participation and ensuring family access. Finally, the *Student* subsystem identifies practices, processes, and systems that support individual students who do not respond to practices and interventions in place at the school-wide or primary tier of prevention. Schools are charged with identifying the practices and interventions that will have the greatest likelihood of success in each subsystem based on their needs, resources, and the competence of the required implementers. Schools customize the identified practices and interventions to the school's context and to the culture of the students and families served by the school.

## Figure B: PBIS Subsystems
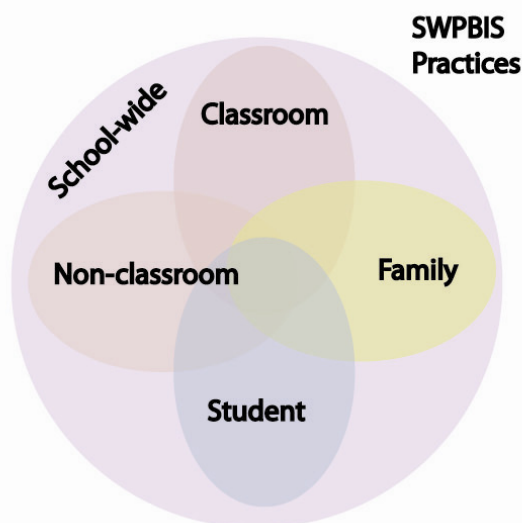


**(Source: OSEP: Center on Positive Behavioral Interventions and Supports, 2010)**

Practices within subsystems are organized along a continuum of support (see Figure C). The continuum typically includes three tiers or layers of support with increasing intensity and complexity. Supplemental or intensive supports at the secondary or tertiary prevention tier are not intended to replace, but rather supplement, primary tier support. In this way, supports are layered, rather than substituted at different tiers (see Figure D). Students are matched to an intervention level dependent on their responsiveness to lower levels of prevention.

The primary prevention level includes practices and systems for all students and staff, implemented across all settings. When implemented effectively and with fidelity, schools should expect to see a response from 70% to 90% of students.

The secondary prevention level includes targeted practices and systems for students who are not responsive to primary tier prevention practices. Secondary prevention is typically provided in a standardized manner for small groups of students demonstrating like needs. When implemented with high quality and fidelity, the secondary tier of prevention is typically able to effectively support an additional 10% to 30% of students behaviorally.

The most intensive tier of prevention and intervention is the tertiary level. The tertiary tier includes specialized practices and systems of support for those students who do not respond to the primary and secondary tier prevention. Intervention plans are designed to meet the individual needs and strengths of this additional 1% to 10% of students.

**Figure C: PBIS Continuum of Support**    **Figure D: Integrated Continuum of Support**
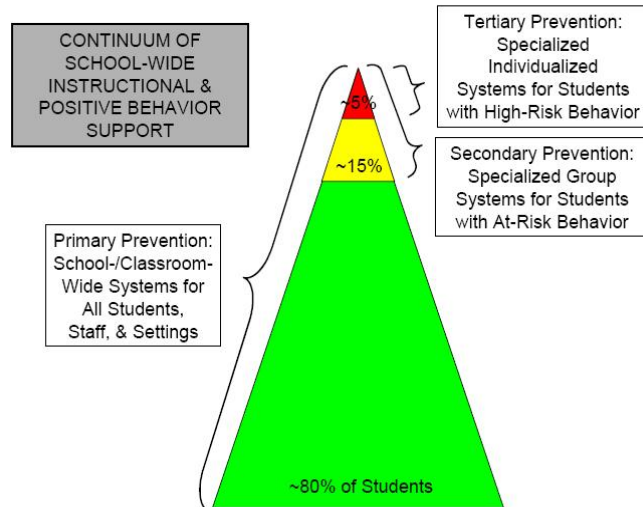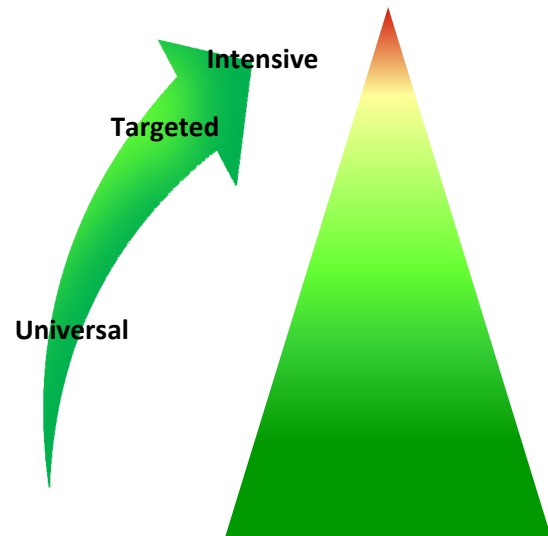




**(Source: OSEP: Center on Positive Behavioral Interventions and Supports, 2010)**

Schools begin by establishing proactive and effective behavioral support for students at the universal (primary) level. Strong primary prevention is accomplished when the host environment (i.e., the whole school community) establishes and maintains universal procedures that contain clear and consistent behavioral expectations. Universal implementation includes customizing evidence-based practices to the specific school environment and culture.

# PBIS and Connecticut's SRBI Framework

PBIS and Connecticut's SRBI (Scientific Research-Based Interventions), similar to RtI (Response to Intervention), use the same framework for developing and implementing a coordinated, comprehensive, and high-quality system of education for *all* students:

"Positive Behavior Interventions and Supports" (PBIS) is a process that is consistent with the core principles of RtI. Similar to RtI, PBIS offers a range of interventions that are systematically applied to students based on their demonstrated level of need, and addresses the role of the environment as it applies to development and improvement of behavior problems.

Both RtI and PBIS are grounded in differentiated instruction. Each approach delimits critical factors and components to be in place at the universal (Tier 1), targeted group (Tier 2), and individual (Tier 3) levels. Our 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." (from PBIS Newsletter, Vol. 4, Issue 2, in OSEP: Center on Positive Behavioral Interventions and Supports, 2010)

Both SRBI and PBIS are prevention-oriented systems of school functioning and resource allocation. PBIS and SRBI share defining characteristics that include: implementation with fidelity; a continuum of evidence-based practices; student performance as a measurement of success; continuous progress monitoring; data-based decision making and problem solving; and universal screening. PBIS within an SRBI framework provides guidance for implementation of evidence-based practices along a continuum of support for behavioral and social development.

# History of PBIS in Connecticut

Connecticut has been involved in the PBIS effort since 2000. Initially, 25 schools were trained through the State Education Resource Center (SERC). In 2005, SERC began its collaboration with the Center for Behavioral Education and Research (CBER) at the University of Connecticut. Through this partnership, approximately 200 schools representing 30 districts received training in School-wide Positive Behavioral Interventions and Supports through 2009-10. An additional eight districts and 45 schools were scheduled to begin training in fall 2010 (see Appendix A). In 2008, SERC/CBER adopted the national PBIS model and began requiring new districts to create a district team and to assign a district coordinator and coach to work with all school-based teams. The district establishes a system for supporting district-wide scaling-up of PBIS and maintains an action plan that devises a strategy for each of the system's implementation features outlined by the National Center on Positive Behavioral Interventions and Supports (Figure E). A comprehensive approach is integral to constructing and sustaining PBIS implementation district-wide while maintaining a cultural and contextual fit.

**Figure E: PBIS Systems Implementation Logic**
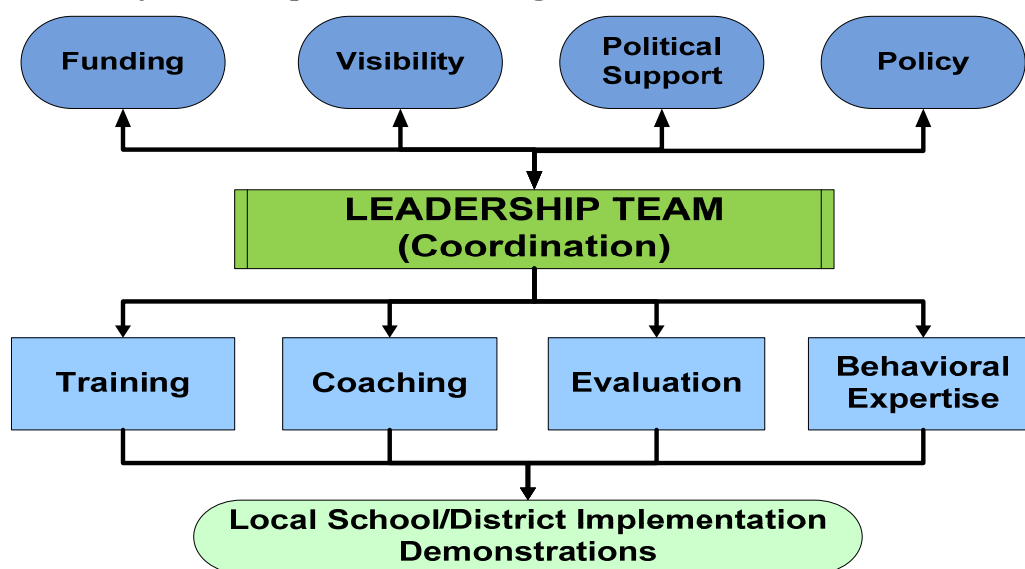


**(Source: OSEP: Center on Positive Behavioral Interventions and Supports, 2010)**

At the state level, systems of support for PBIS are essential for the long-term success of districts and individual schools. State-level infrastructure provides the context and resources necessary for high-quality local implementation and fidelity of implementation over time (OSEP: Center on Positive Behavioral Interventions and Supports, 2010). With guidance from the National Center on PBIS, the Leadership Team at SERC is working to establish a statewide system of PBIS implementation and support. Durability and adaptability of a statewide system requires the ongoing enhancement and systematization of the following features:

- A **Statewide Leadership Team** that involves a variety of partners and stakeholders;
- **Coordination** through SERC and the Connecticut State Department of Education (CSDE);
- Adequate and sustained **Funding Support**;
- **Visibility** of outcomes and commitment to PBIS;
- Relevant and effective **Political Support**;
- Informed **Policy** making;

- High-quality regional and local *Training Capacity*;
- High-quality regional and local *Coaching Capacity*;
- High-quality regional and local *Evaluation Capacity*;
- High-quality regional and local *Behavioral Expertise*;
- *Model Schools* that demonstrate effective implementation and sustainability; and
- *Program Evaluation* to ensure implementation fidelity and to measure outcomes.

Since 2005, state and national awareness have created a steadily growing demand for PBIS training in Connecticut. In 2008, CBER, in collaboration with SERC, established a Trainer of Trainers Network for PBIS. The PBIS Trainer of Trainers Network is supported by the National Technical Assistance Center on PBIS and annually provides a cohort of education professionals with the requisite qualifications and experiences to be high-quality PBIS trainers. These trainers have established a common vision, language, and experience supportive of the implementation of a statewide system of PBIS.

# Current Status of PBIS in Connecticut

**Training Data**

The SERC/UConn collaboration has trained more than 175 schools since 2005 (Figure F). Schools at all grade levels (preschool, elementary, intermediate, middle, and high), as well as alternative schools, have participated in PBIS training. However, the majority, approximately 57%, are K-6 elementary schools and 20% are K-(8-12) schools (Figure G).

**Figure F: Summary of Schools Adopting PBIS between 2005-2006 and 2009-2010**

| Connecticut PBIS Schools | Current (new) Total | Cumulative Total |
| --- | --- | --- |
| 2005-06 | 25 | 25 |
| 2006-07 | 22 | 47 |
| 2007-08 | 25 | 72 |
| 2008-09 | 47 | 119 |
| 2009-10 | 54 | 173 |

**Connecticut PBIS Schools – Summary of Schools Adopting SWPBIS 2005-2006 through 2009-2010**
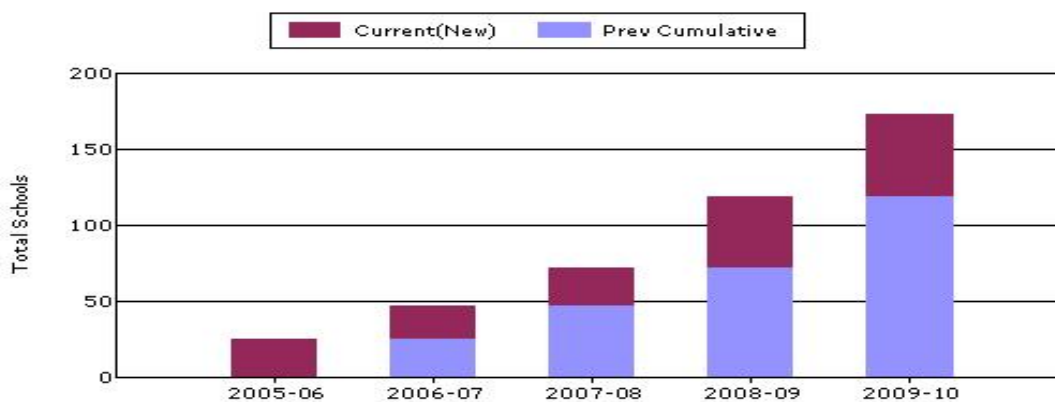


\* - Total does not include schools that have no data in consecutive years

**Figure G: Summary of Schools Adopting PBIS by Grade Level, 2009-2010**
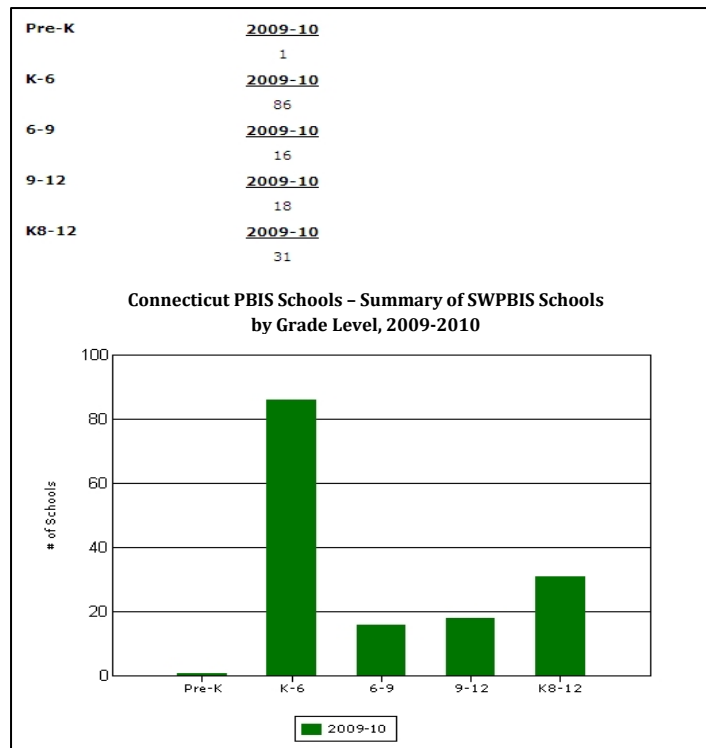
| | 2009-10 |
|---|---|
| Pre-K | 1 |
| K-6 | 86 |
| 6-9 | 16 |
| 9-12 | 18 |
| K8-12 | 31 |

**Connecticut PBIS Schools – Summary of SWPBIS Schools by Grade Level, 2009-2010**



Source: www.pbseval.org
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

Since 2000, 201 of Connecticut's public schools have participated in some level of PBIS training. This total represents 18% or nearly one-fifth of the state's public schools. Between 2007-2008 and 2009-2010, 26 districts committed to scaling-up PBIS district-wide. These 26 districts represent approximately 16% or one-sixth of Connecticut's 166 districts (CSDE, 2008). An additional 45 schools representing eight districts have committed to scaling-up district-wide beginning in 2010-11 (See Figure H).

**Figure H: Total Number of CT Schools and Districts Trained in PBIS (from 2005)**

Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

Of the 201 schools trained since 2000, however, the level of implementation is unknown for approximately 25. These schools are no longer active in the statewide training and evaluation process. The majority of these schools were trained between 2000 and 2005, when SERC's structures to provide ongoing support and evaluation were not as thoroughly developed as they are today.

## Implementation Data

Connecticut uses the School-wide Evaluation Tool (SET) to measure implementation of School-wide PBIS. Schools are evaluated on an annual basis to establish a baseline, initial implementation success, and long-term sustainability of school-wide practices and systems. The SET is a research-validated tool designed to assess the degree of implementation of SWPBIS critical features as defined by the National Technical Assistance Center on PBIS.

Based on the SET, schools are labeled as having "met SET" or implementing to criterion when they have received a score of 80% for the measurement of "expectations taught" and an overall average score of 80% (Sprague & Walker, 2005).

Expanded evaluation capacity in the state allowed for a significantly larger number of SETs to be conducted in PBIS-trained schools during 2009-2010 (103 SETs) than were conducted during the 2008-2009 school year (42 SETs). The larger number of SETs completed enhanced the state's ability to review the degree to which PBIS is implemented in Connecticut. Of the 42 total schools evaluated during the 2008-2009 school year, 25 (60%) demonstrated implementation to criterion. A similar percentage of schools (55%) demonstrated implementation to criterion during the 2009-2010 school year (57/103). (See Figures I, J, K, L, and M).

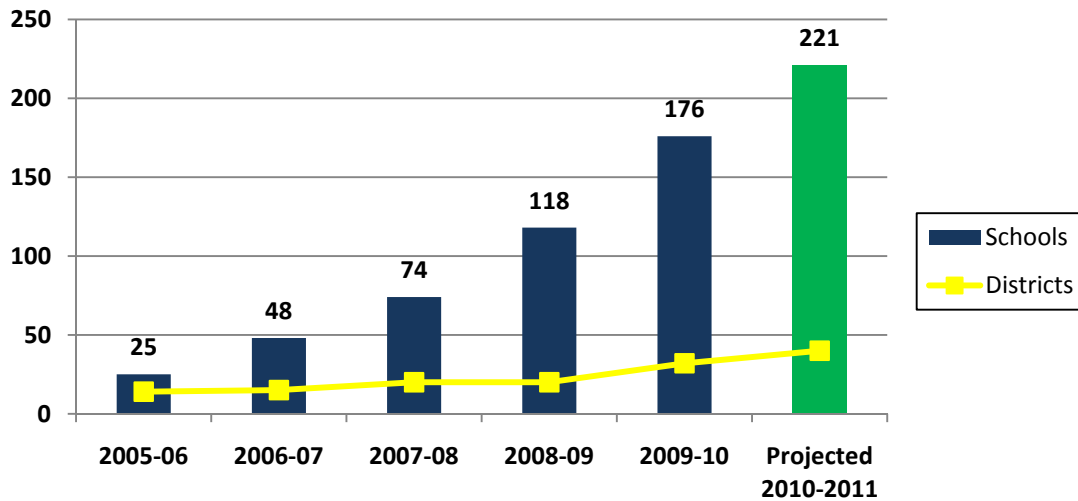## Figure I: Connecticut Level of Implementation, Pre-K SETs, 2008-2009 and 2009-2010
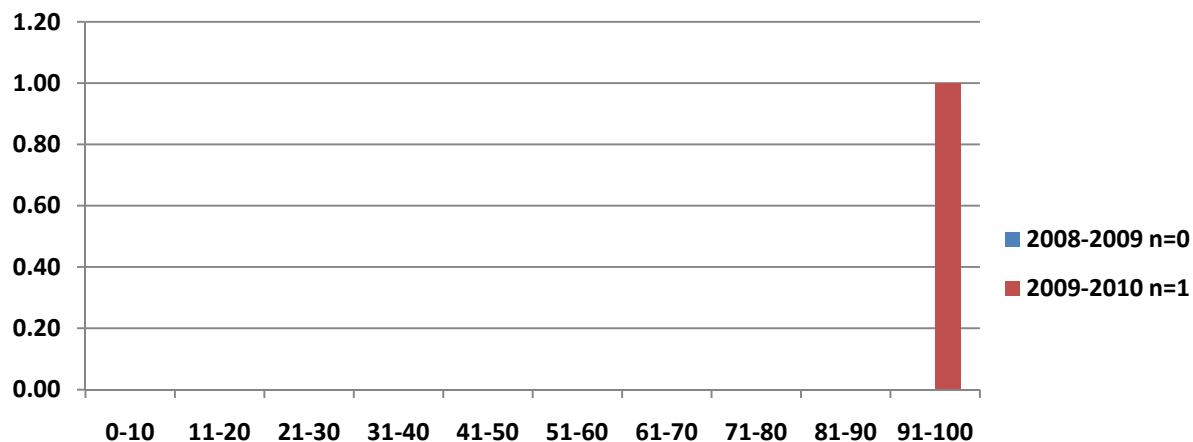


Source: www.pbiseval.org
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

## Figure J: Connecticut Level of Implementation, Elementary (K-6) SETs, 2008-2009 and 2009-2010
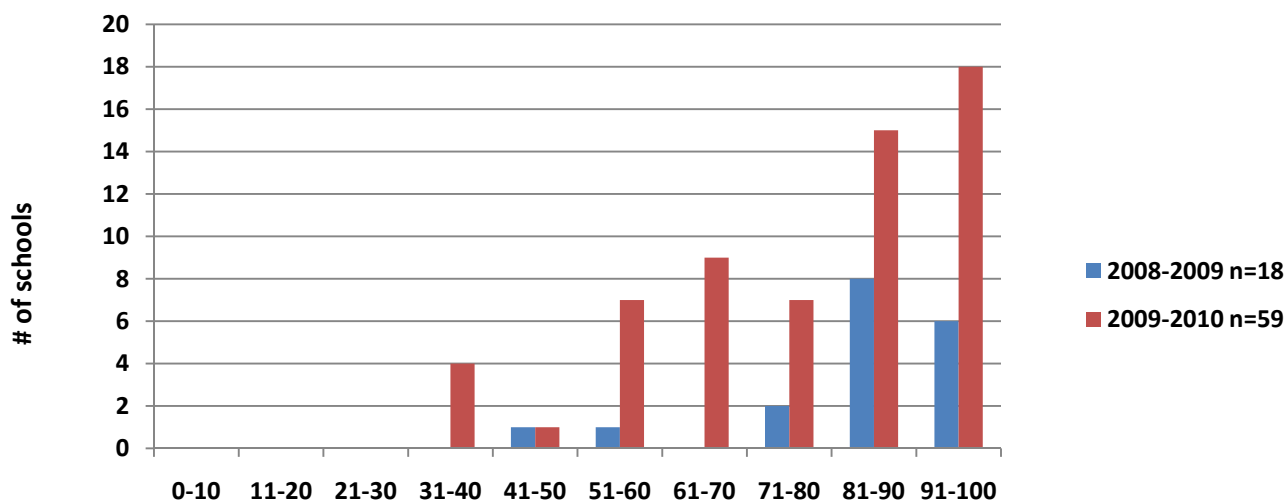


Source: www.pbiseval.org
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

**Figure K: Connecticut Level of Implementation, Middle School (6-9) SETs, 2008-2009 and 2009-2010**
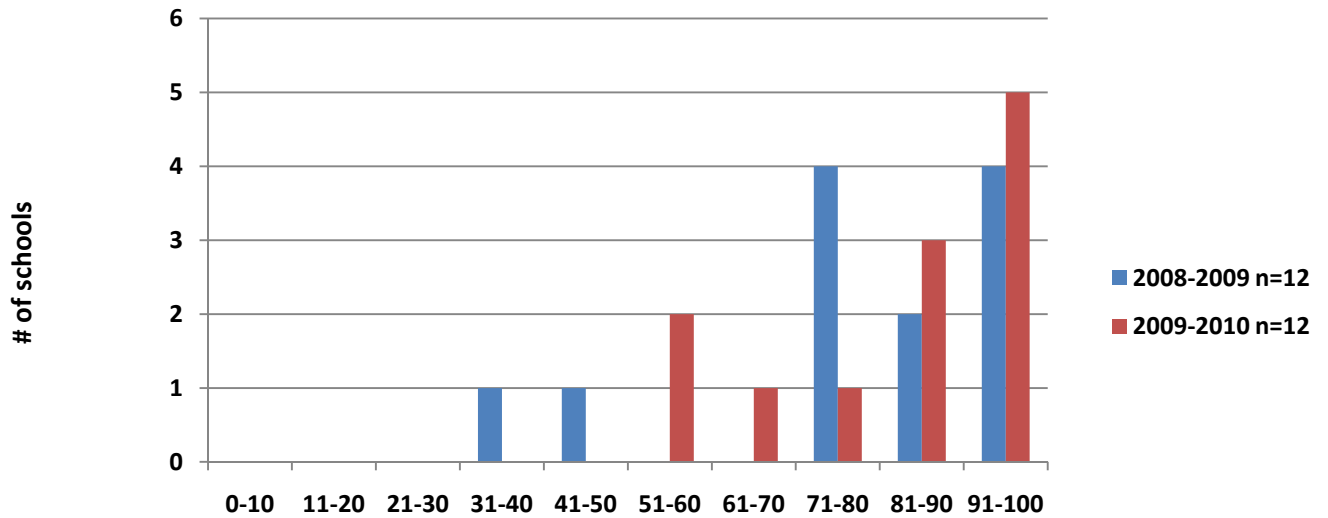


Source: www.pbiseval.org
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

**Figure L: Connecticut Level of Implementation, High School (9-12) SETs, 2008-2009 and 2009-2010**
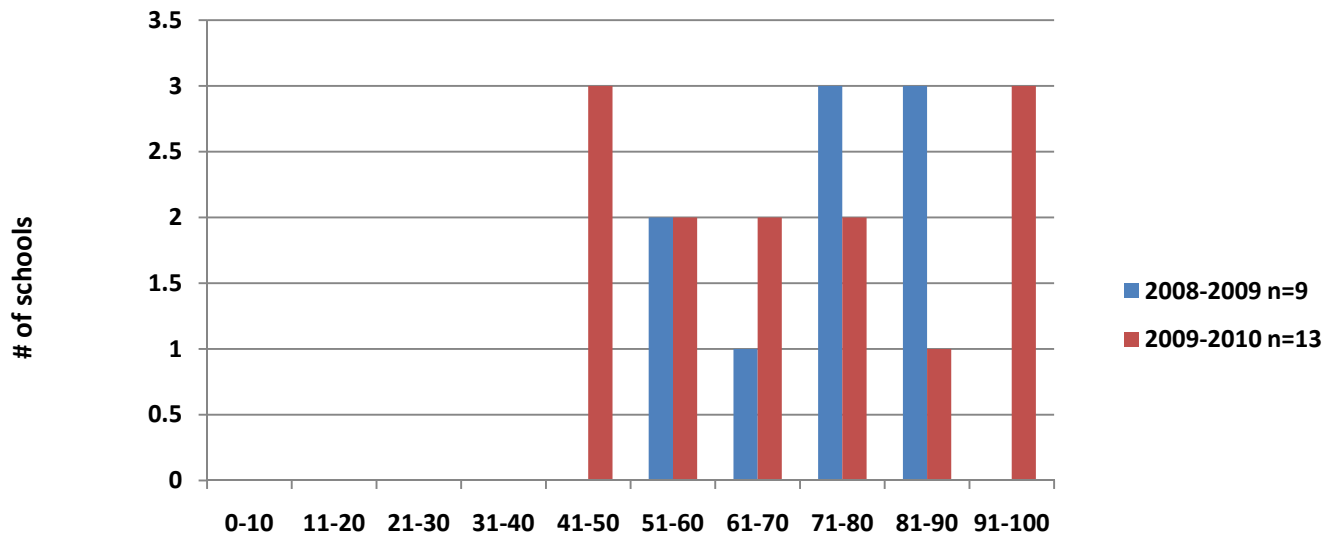


Source: www.pbiseval.org
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

**Figure M: Connecticut Level of Implementation, K-(8-12) SETs, 2008-2009 and 2009-2010**
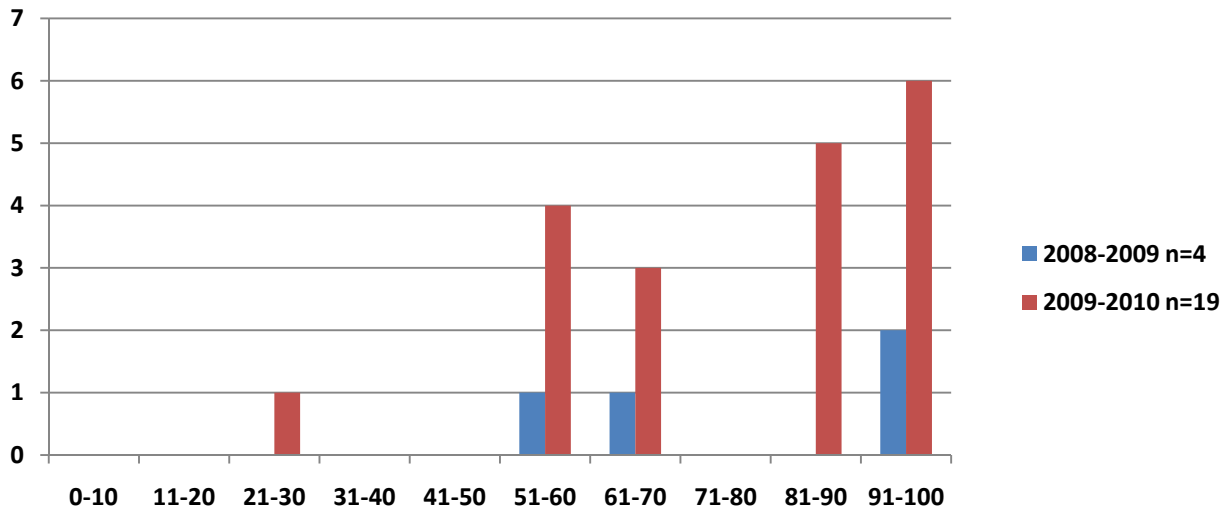
Schools at all grade levels (elementary, middle, and high) demonstrated growth in implementation between 2006-2007 and 2009-2010, although some schools saw reduced implementation levels in the third or fourth year of the evaluation. Schools were included in the data set if they were evaluated a minimum of three times using the SET between 2006-2007 and 2009-2010. Of the 24 schools included in the data set, 20 received a minimum score of 80/80 during at least one year of the evaluation period. Twelve of the 24 schools maintained implementation to criterion during two years of the evaluation period, and six schools maintained implementation during three years of the evaluation period. Although most schools maintained implementation fidelity after it was achieved, some schools received diminished scores even after meeting 80/80 on the SET. (See Figures N, O, P, Q, and R).

# Figure N: SET Evaluation Growth and Schools Meeting SET, 2005-2006 through 2009-2010

Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

**Figure O: Elementary Schools Maintaining Implementation, 2006-2007 through 2009-2010**

Legend: 2006-2007, 2007-2008, 2008-2009, 2009-2010

**Source: www.pbseval.org**
A score of 80/80 (80 for Expectations Taught and 80 for Overall Average) is considered implementing with fidelity (Sprague & Walker, 2005)
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

# Figure P: Elementary Schools Maintaining Implementation, 2006-2007 through 2009-2010 *(Cont.)*



**Legend:**
- 2006-2007
- 2007-2008
- 2008-2009
- 2009-2010

**Source: www.pbseval.org**

Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

A score of 80/80 (80 for Expectations Taught and 80 for Overall Average) is considered implementing with fidelity (Sprague & Walker, 2005).

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**Figure Q: Middle Schools Maintaining Implementation, 2006-2007 through 2009-2010**
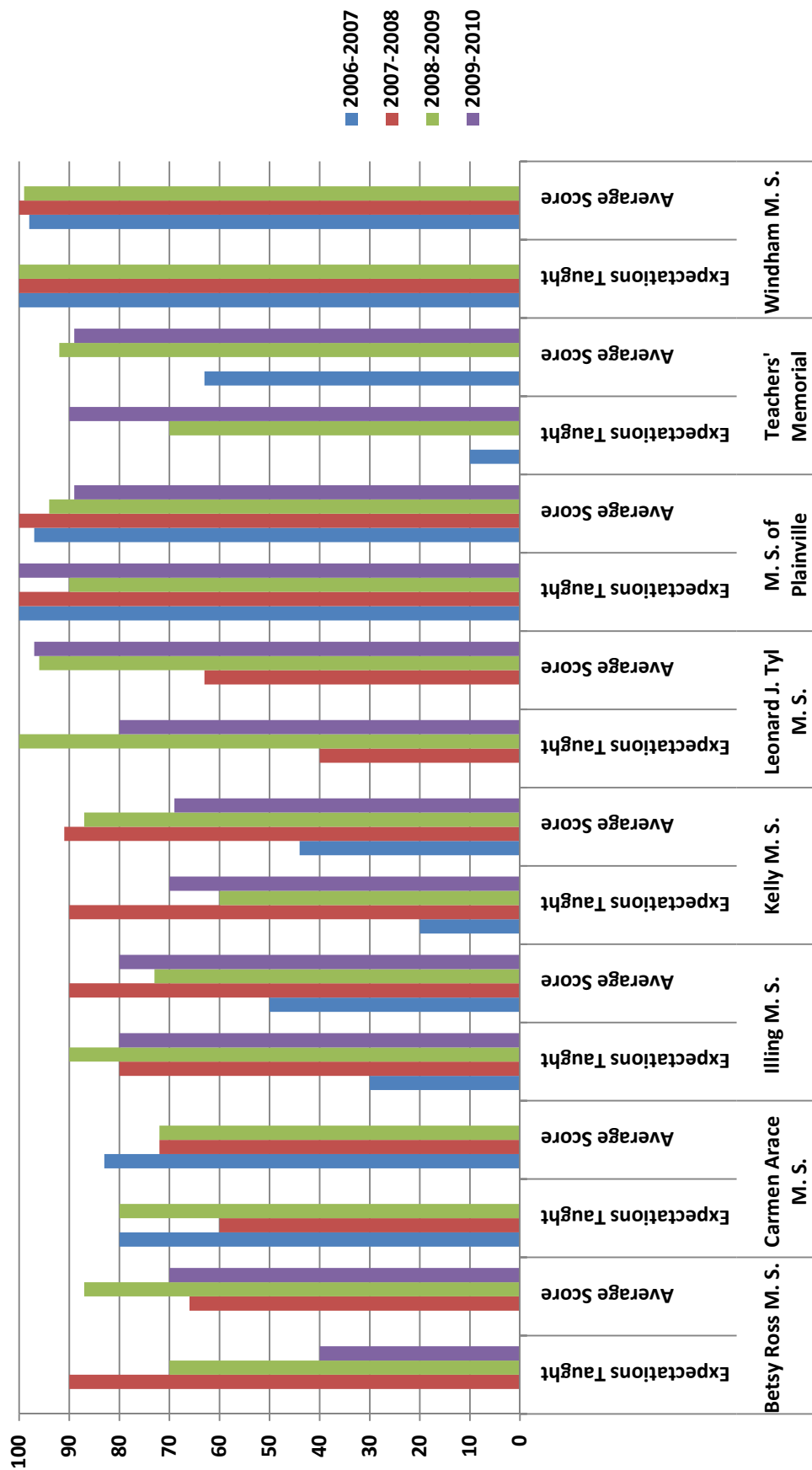
Legend:
- 2006-2007
- 2007-2008
- 2008-2009
- 2009-2010

Schools (categories): Betsy Ross M. S., Carmen Arace M. S., Illing M. S., Kelly M. S., Leonard J. Tyl M. S., M. S. of Plainville, Teachers' Memorial, Windham M. S.

Measures per school: Expectations Taught, Average Score

X-axis: 0 to 100

**Figure R: High Schools Maintaining Implementation, 2007-2008 through 2009-2010**



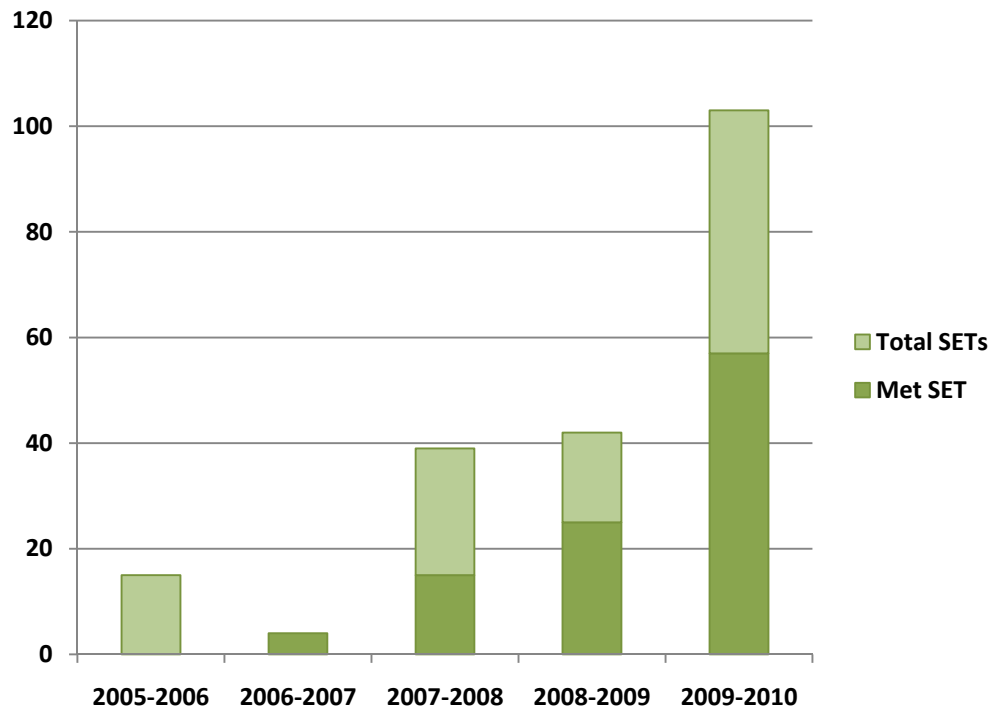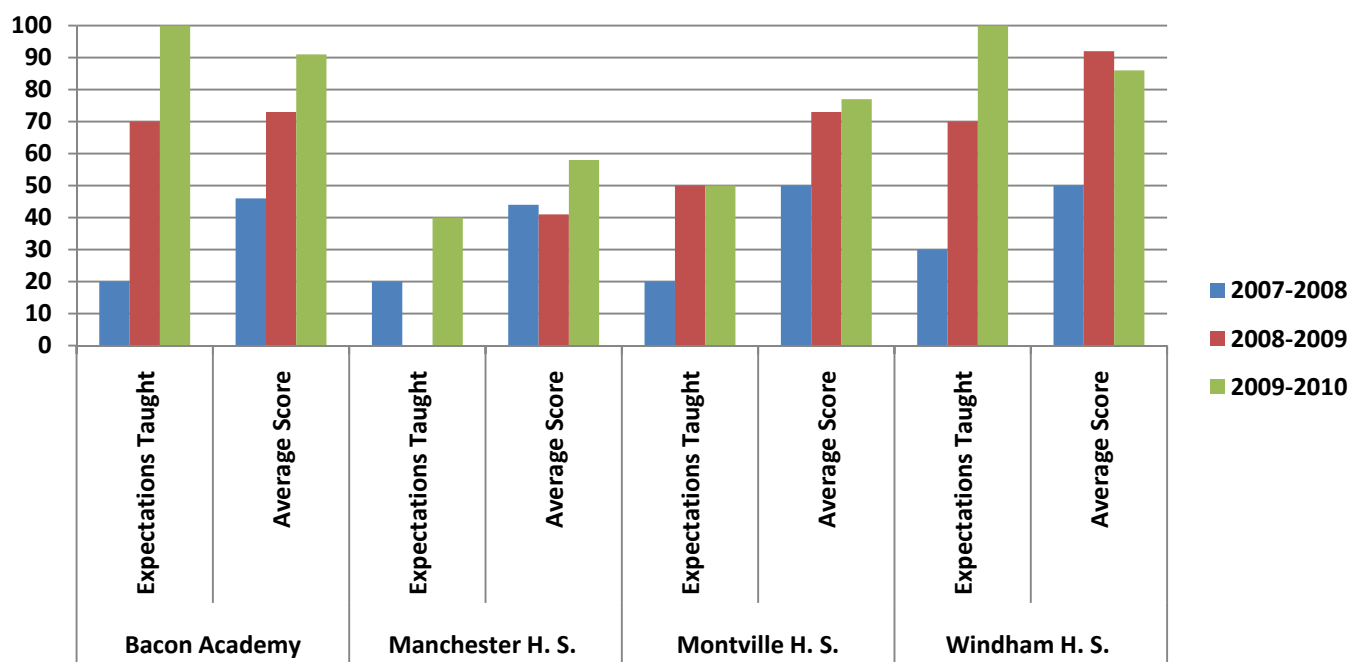A score of 80/80 (80 for Expectations Taught and 80 for Overall Average) is considered implementing with fidelity (Sprague & Walker, 2005).
Source: www.pbseval.org
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

All PBIS schools are taught to use the integrated elements (outcomes, data, practices, and systems) to process current strengths and needs, and to devise an ongoing action plan. Review of up-to-date data is essential to making relevant and durable decisions about changes to the school-wide system and program.

Beginning in 2009-2010, schools applying to participate in Connecticut's SWPBIS Training Series were required to use the SWIS (School-wide Information System) data system for, at minimum, the three years in which they are involved in the Training Series. SWIS is a Web-based data collection system that tracks Office Discipline Referral (ODR) information. It allows school staff to distinguish between major and minor infractions within five specific areas (the "Big 5"). The five charts that are included in the Big 5 report are: Average Referrals Per Day Per Month, Referrals by Problem Behavior, Referrals by Time, Referrals by Location, and Referrals by Student. The system also allows staff to produce a myriad of custom graphs and reports defined by various parameters (e.g., individual student, ethnicity, referring staff, grade level).

Schools are asked to review at minimum the SWIS Big 5 at every team meeting and team training event. Together the Big 5 highlight the essential information about the current condition of behavior in the school and enable teams to detect areas of success and immediate concern. Aggregate data for three of these charts (referrals by problem behavior, time, and location) are made available for statewide review by the University of Oregon's Web-based progress monitoring service, PBISEval (www.pbiseval.org).

Most PBIS schools in Connecticut use the SWIS system. Those that don't might have difficulty reviewing the data necessary during team meetings and team trainings to engage in the decision-making process.

Statewide data from SWIS are disaggregated by grade level. The following grade levels are available for aggregate review: K-6; 6-9; 9-12; and K-[8-12].

During the 2009-2010 school year, the largest percentage of major problem behaviors in K-6 elementary schools (n=67) were Defiance/Disrespect/Insubordination/Non-Compliance (30%) and Fighting/Physical Aggression (32%). The largest percentage of major problem behaviors in middle schools (grades 6-9; n=11) were Defiance/Disrespect/Insubordination/Non-Compliance (34%) and Disruption (18%). The largest percentage of major problem behaviors in high schools (grades 9-12; n=16) were Defiance/Disrespect/Insubordination/Non-Compliance (27%) and Skipping (26%). The largest percentage of major problem behaviors in schools grades K-(8-12) (n=22) were Defiance/Disrespect/Insubordination/Non-Compliance (29%) and Fighting/Physical Aggression (17%). (See Figure S).

**Figure S: Statewide Office Discipline Referrals by Problem Behavior, 2009-2010**
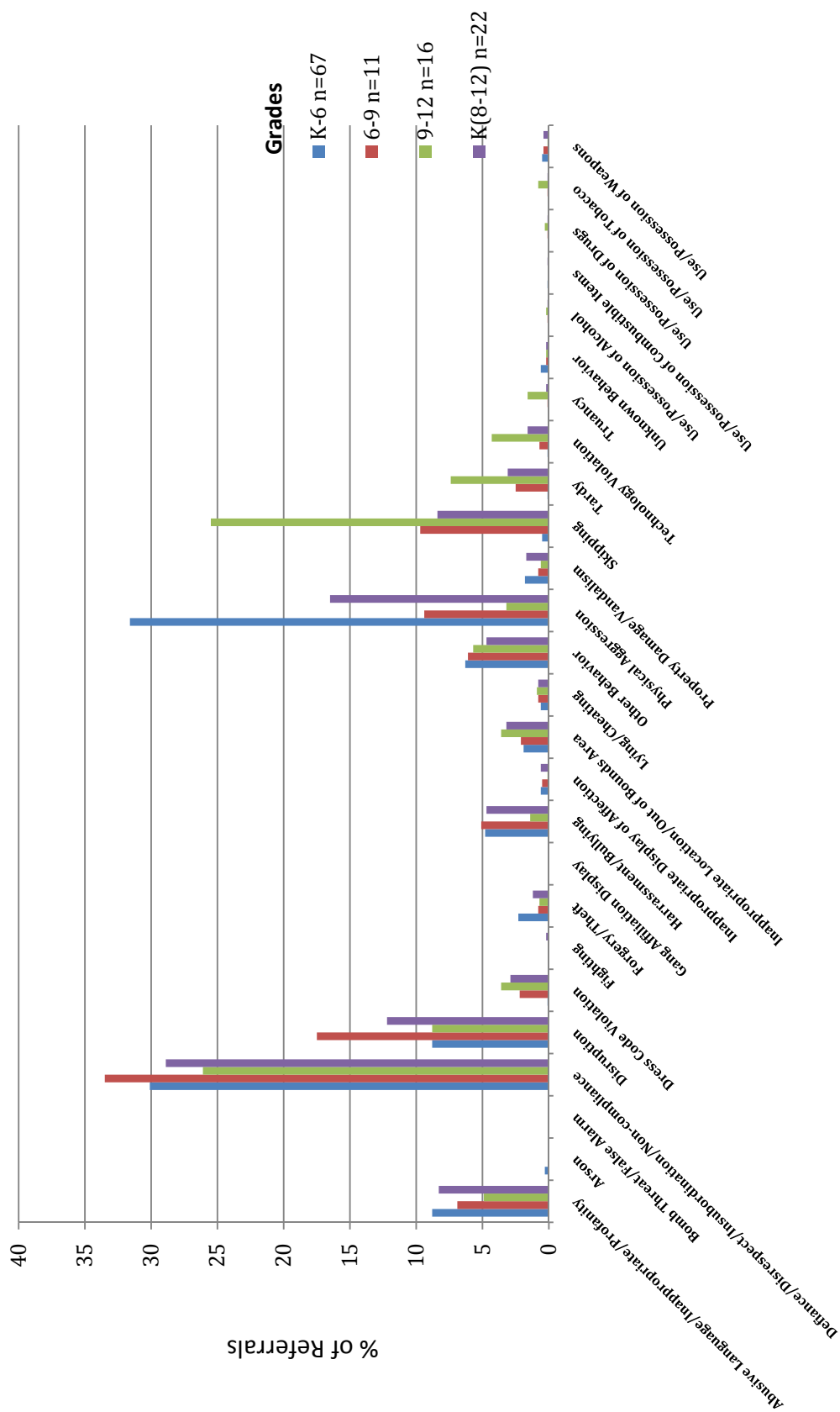


Source: www.pbiseval.org. Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

During the 2009-2010 school year, the majority of major problem behaviors in elementary schools (grades K-6) occurred in Classrooms (52%) and on the Playground (16%). The majority of major problem behaviors in middle schools (grades 6-9) occurred in Classrooms (64%) and in Hallways (18%). The majority of major problem behaviors in high schools (grades 9-12) occurred in Classrooms (59%), Unknown locations (12%), and Hallways (11%). The majority of major problem behaviors in schools grades K-(8-12) occurred in Classrooms (63%) and Hallways (14%). (See Figure T.)

**Figure T: Statewide Office Discipline Referrals by Location, 2009-2010**



Source: www.pbiseval.org. Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

During the 2009-2010 school year, the majority of major problem behaviors in elementary schools (grades K-6) happened between 11:45 a.m. and 1:00 p.m. The majority of major problem behaviors in middle schools (grades 6-9) happened at 8:00 a.m., 12:00 p.m., and 1:30 p.m. The majority of major problem behaviors in high schools (grades 9-12) happened at 10:00 a.m., 11:00 a.m., 12:00 p.m., and 2:15 p.m. The majority of major problem behaviors in schools grades K-(8-12) happened at 8:00 a.m., 10:00 a.m., and 12:00 p.m. (See Figure U).

**Figure U: 2009-2010 Office Discipline Referrals by Time of Day**
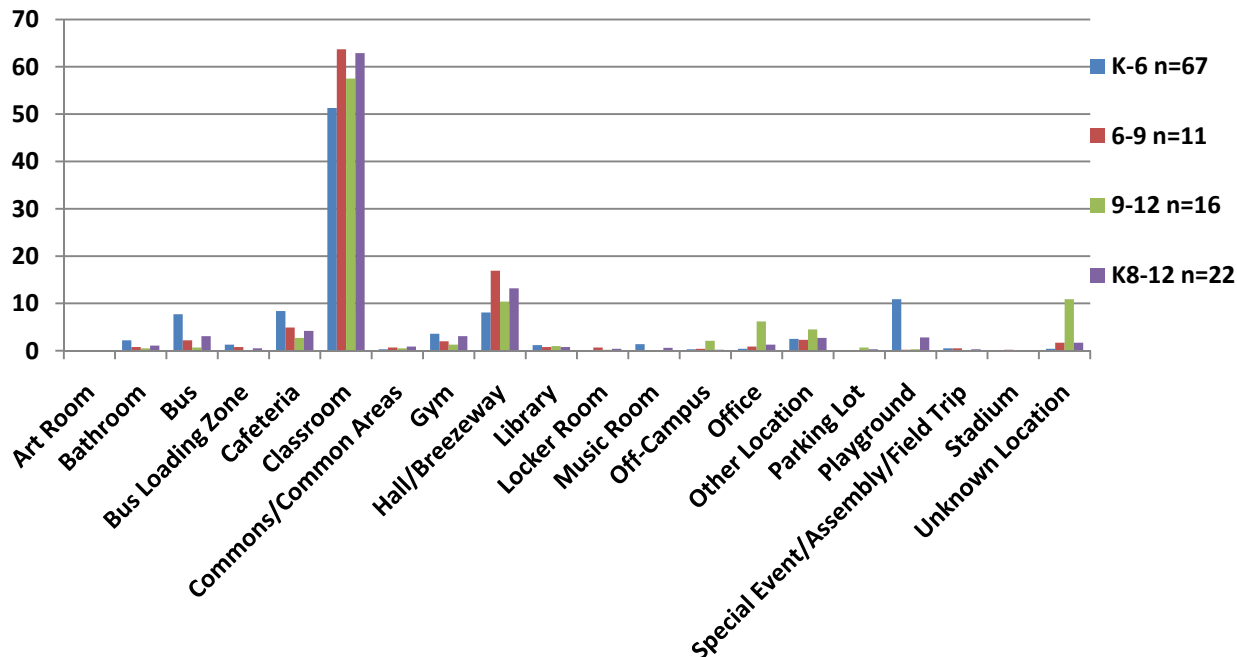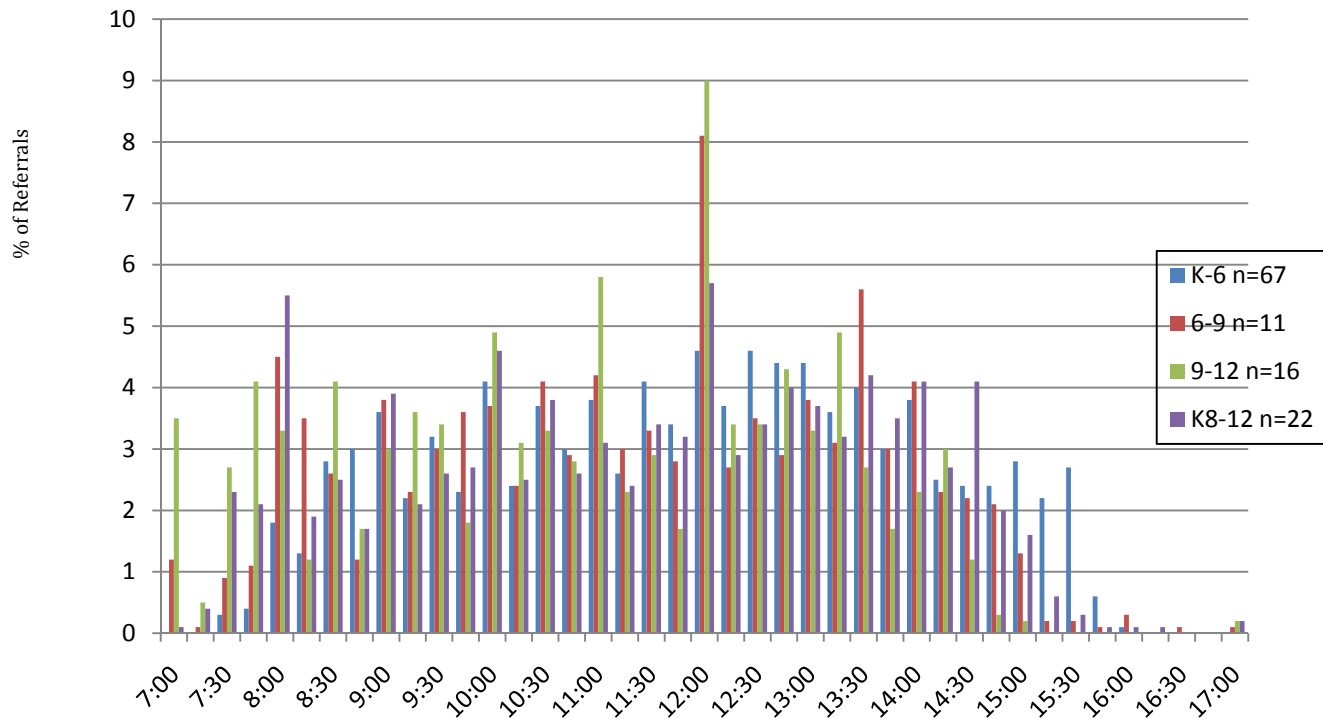


Source: www.pbiseval.org. Figure represents data only from schools using the SWIS system or PBS surveys and is not representative of all PBIS-trained schools.

During the 2009-2010 school year, PBIS schools using SWIS had a common distribution of referrals by gender across grade levels. Males were significantly more likely to receive office discipline referrals from elementary through high school. The largest variation occurred in elementary schools K-6, where more than four-fifths of referrals (81.7%) were received by male students. (See Figure V.)

**Figure V: Statewide Office Discipline Referrals by Gender, 2009-2010**
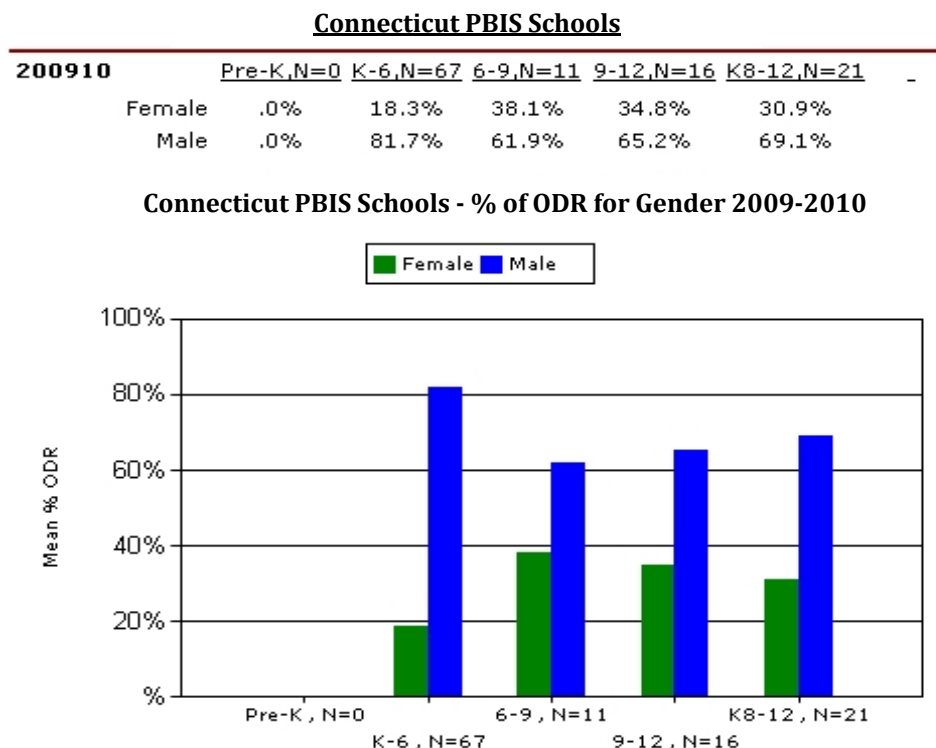
<u>**Connecticut PBIS Schools**</u>

| 200910 | Pre-K,N=0 | K-6,N=67 | 6-9,N=11 | 9-12,N=16 | K8-12,N=21 |
|---|---|---|---|---|---|
| Female | .0% | 18.3% | 38.1% | 34.8% | 30.9% |
| Male | .0% | 81.7% | 61.9% | 65.2% | 69.1% |

**Connecticut PBIS Schools - % of ODR for Gender 2009-2010**

SWIS allows schools the option of tracking ODR data by ethnicity. Although most schools choose not to, approximately one-third of Connecticut schools used the ethnicity feature in 2009-2010. These schools are able to compare the ethnicity of students receiving referrals to school-wide ethnicity distribution. Although the number of schools contributing to the data set is smaller, statewide data by ethnicity is available for grade ranges that have two or more schools contributing to the data set. Referral data demonstrate a degree of disproportionately by race at all grade levels, with some racial groups overrepresented in the data and some racial groups underrepresented. Latino students were the most significantly overrepresented at all grade ranges. The largest variation was in K-6 schools, where Latino students constituted 25.9% of the total student population, but 46.7% of the students receiving referrals. At the available grade levels, White students were consistently underrepresented in the data. The largest variation for White students was in K-6 schools, where White students constituted 49.4% of the total student population, but 37.8% of the students with referrals. (See Tables 1, 2, and 3.)

**Table 1: Referrals by Ethnicity, K-6, 2009-2010** *This table comprises data from schools using SWIS that disaggregate their data by race.*

| Ethnicity | Total Enroll | % Enroll Students | Students w/Referrals | % Student w/Referrals | Referrals | % Referrals |
|---|---|---|---|---|---|---|
| American Indian/Alaskan Native | 52 | 1.6% | 0 | 0% | 0 | 0% |
| Asian | 214 | 6.6% | 0 | 0% | 0 | 0% |
| Black | 540 | 16.5% | 7 | 15.6% | 13 | 16.5% |
| Hispanic/Latino | 847 | 25.9% | 21 | 46.7% | 40 | 50.6% |
| White | 1614 | 49.4% | 17 | 37.8% | 26 | 32.9% |
| Total | 3267 | 100% | 45 | 100% | 79 | 100% |

**Table 2: Referrals by Ethnicity, 6-9, 2009-2010**

| Ethnicity | Total Enroll | % Enroll Students | Students w/Referrals | % Student w/Referrals | Referrals | % Referrals |
|---|---|---|---|---|---|---|
| American Indian/Alaskan Native | 55 | 2.0% | 0 | 0% | 0 | 0% |
| Asian | 175 | 6.4% | 1 | 4.2% | 1 | 2.0% |
| Black | 293 | 10.7% | 3 | 12.5% | 7 | 14.0% |
| Hispanic/Latino | 264 | 9.6% | 4 | 16.7% | 4 | 8.0% |
| Unknown | 7 | .3% | 0 | 0% | 0 | 0% |
| White | 1948 | 71.0% | 16 | 66.7% | 38 | 76.0% |
| Total | 2742 | 100% | 24 | 100% | 50 | 100% |

**Table 3: Referrals by Ethnicity, 9-12, 2009-2010**

| Ethnicity | Total Enroll | % Enroll Students | Students w/Referrals | % Student w/Referrals | Referrals | % Referrals |
|---|---|---|---|---|---|---|
| American Indian/Alaskan Native | 9 | .6% | 0 | 0% | 0 | 0% |
| Asian | 33 | 2.2% | 1 | 2.2% | 1 | .9% |
| Black | 167 | 11.1% | 4 | 8.7% | 15 | 13.6% |
| Hispanic/Latino | 157 | 10.4% | 7 | 15.2% | 9 | 8.2% |
| White | 1142 | 75.7% | 34 | 73.9% | 85 | 77.3% |
| Total | 1508 | 100% | 46 | 100% | 110 | 100% |

**Source: www.pbseval.org.** Charts represent data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

## Outcomes Data

Data from Connecticut PBIS schools using SWIS show overall decreases in major referral rates between 2007-2008 and 2009-2010 for 6-9, 9-12, and K-(8-12) schools. Elementary schools (K-6) had a very small increase from .36 average referrals per 100 students per day to .37 average referrals per 100 students per day in 2009-2010. K-(8-12) schools saw the most dramatic decrease, going from .83 average referrals to .40 average referrals.  All grade ranges saw decreases in combined major and minor office discipline referrals. Middle schools (6-9) saw the most significant reductions, going from 2.65 average referrals per 100 students per day to 1.28 average referrals. (See Figures W and X.)

**Figure W: Major Office Discipline Referrals per 100 Students per Day, 2007-2008 through 2009-2010**
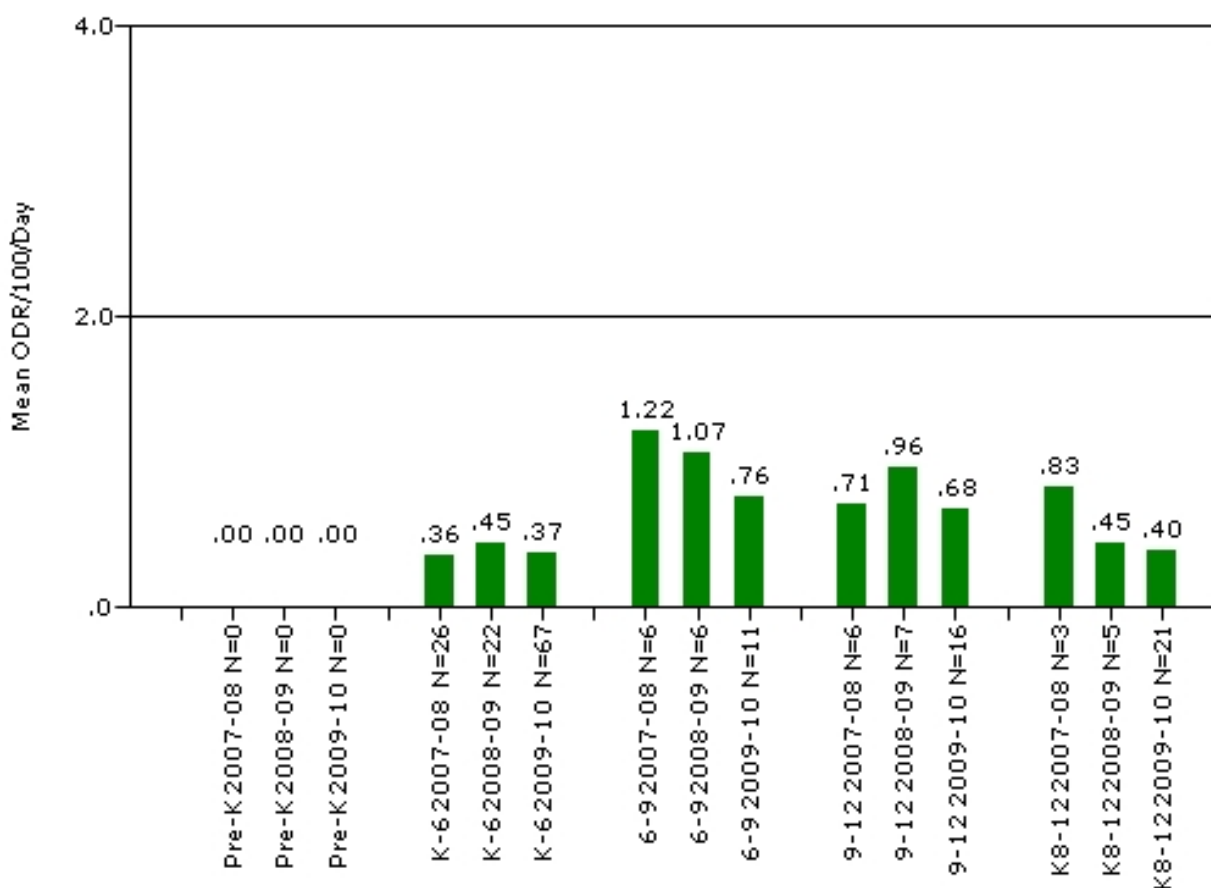


Source: www.pbseval.org
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

**Figure X: Major and Minor Office Discipline Referrals per 100 Students per Day, 2007-2008 through 2009-2010**
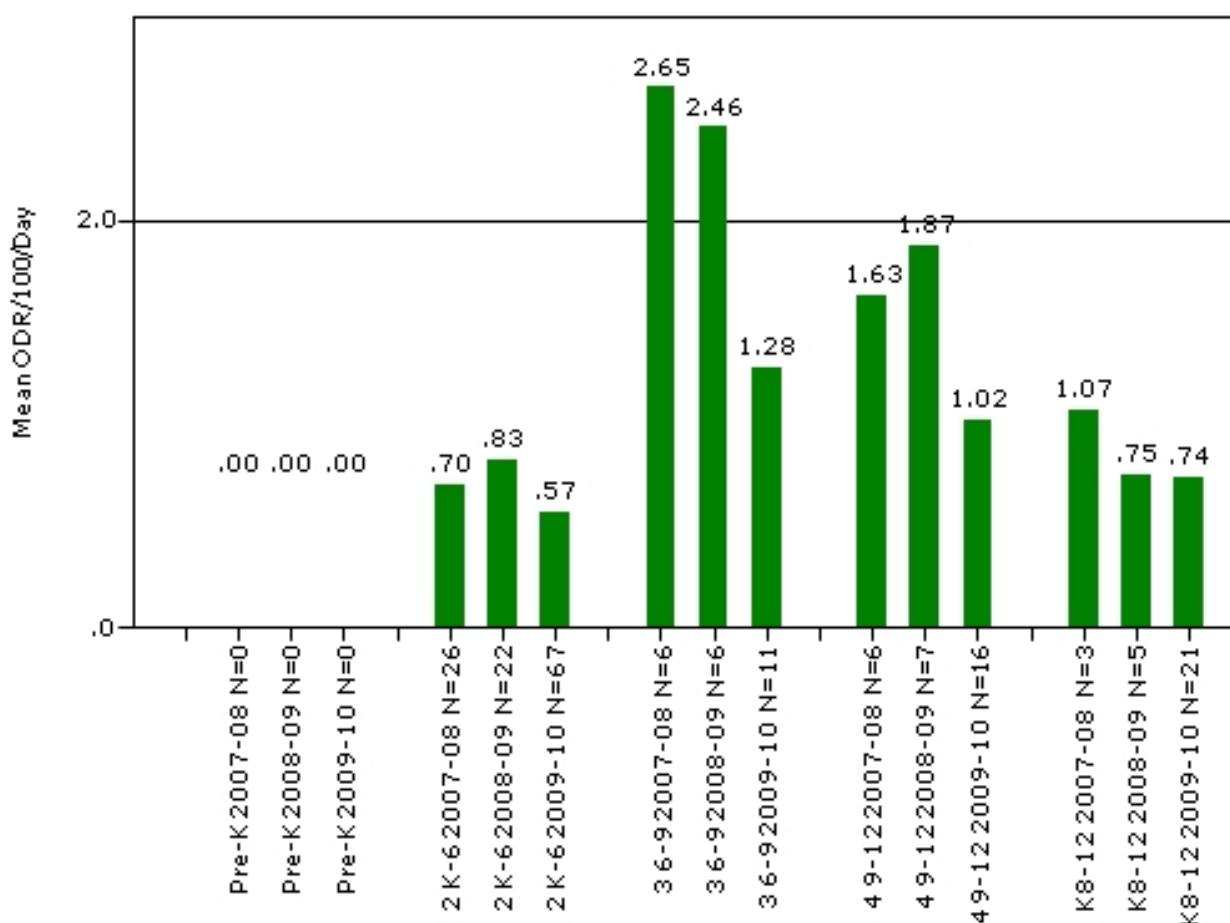
Overall, office discipline referral data from Connecticut schools using SWIS compare favorably with the national averages. Nationally, according to the SWIS data bank, in 2008-2009 students received office discipline referrals at the following average rates: .34 major referrals per day per 100 students for schools grades K-6; .85 major referrals per day per 100 students for schools grades 6-9; 1.27 major referrals per day per 100 student for schools grades 9-12; and 1.06 referrals per day per 100 students for schools grades K-(8-12). Aggregated data for Connecticut schools using SWIS show that schools at all grade ranges except for elementary K-6 have average daily referral rates per 100 students lower than the national average. Schools in the K-(8-12) grade range had the largest difference from the national average, with a local average of .4 referrals versus the national average of 1.06. Connecticut high schools (9-12) had a large difference as well, averaging .68 referrals versus the national average of 1.27 referrals. (See Figure Y.)

**Figure Y: Connecticut Average ODRs Compared to National Average ODRs**
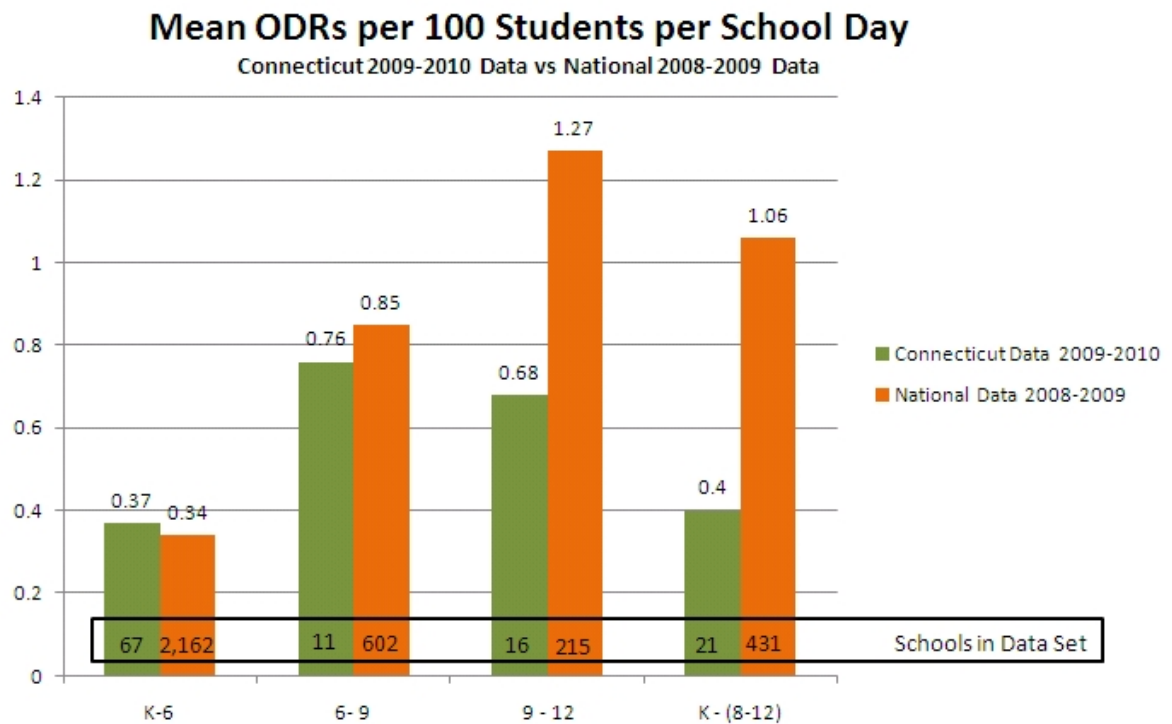


## Mean ODRs per 100 Students per School Day
### Connecticut 2009-2010 Data vs National 2008-2009 Data

Legend:
- ■ Connecticut Data 2009-2010
- ■ National Data 2008-2009

Schools in Data Set:
| | K-6 | 6-9 | 9-12 | K-(8-12) |
|---|---|---|---|---|
| Connecticut | 67 | 11 | 16 | 21 |
| National | 2,162 | 602 | 215 | 431 |

Mean ODR values:
| | K-6 | 6-9 | 9-12 | K-(8-12) |
|---|---|---|---|---|
| Connecticut | 0.37 | 0.76 | 0.68 | 0.4 |
| National | 0.34 | 0.85 | 1.27 | 1.06 |

Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

While establishing tiered systems of support, schools review the distribution of referrals by the students receiving referrals in order to isolate which tier of intervention needs to be revisited. Triangle distributions clarify how many students are contributing to the referral rate and the overall picture of discipline in the school. The National Center on PBIS has identified ideal goal distributions for schools at various grade levels (see Figure Z). When systems of positive behavioral support are working efficiently and effectively, schools can expect the vast majority of students to receive 0-1 office discipline referrals. Typically, 89% of elementary students (K-6), 77% of middle school students (6-9), and 74% of students in high schools (9-12) receive 0-1 referrals. Subsequently, the numbers of students in need of tier two and three intervention vary by grade level as well. Generally, because of higher referral rates, 8% of students in elementary schools require tier two intervention and at most 3% of students receive support at tier three. In middle school, it is common that tier two supports are offered to 15% of students and that at most 8% of students receive tier three interventions. Similarly, in high schools, 16% and at most 9% of students receive tier two and tier three interventions respectively.

**Figure Z**
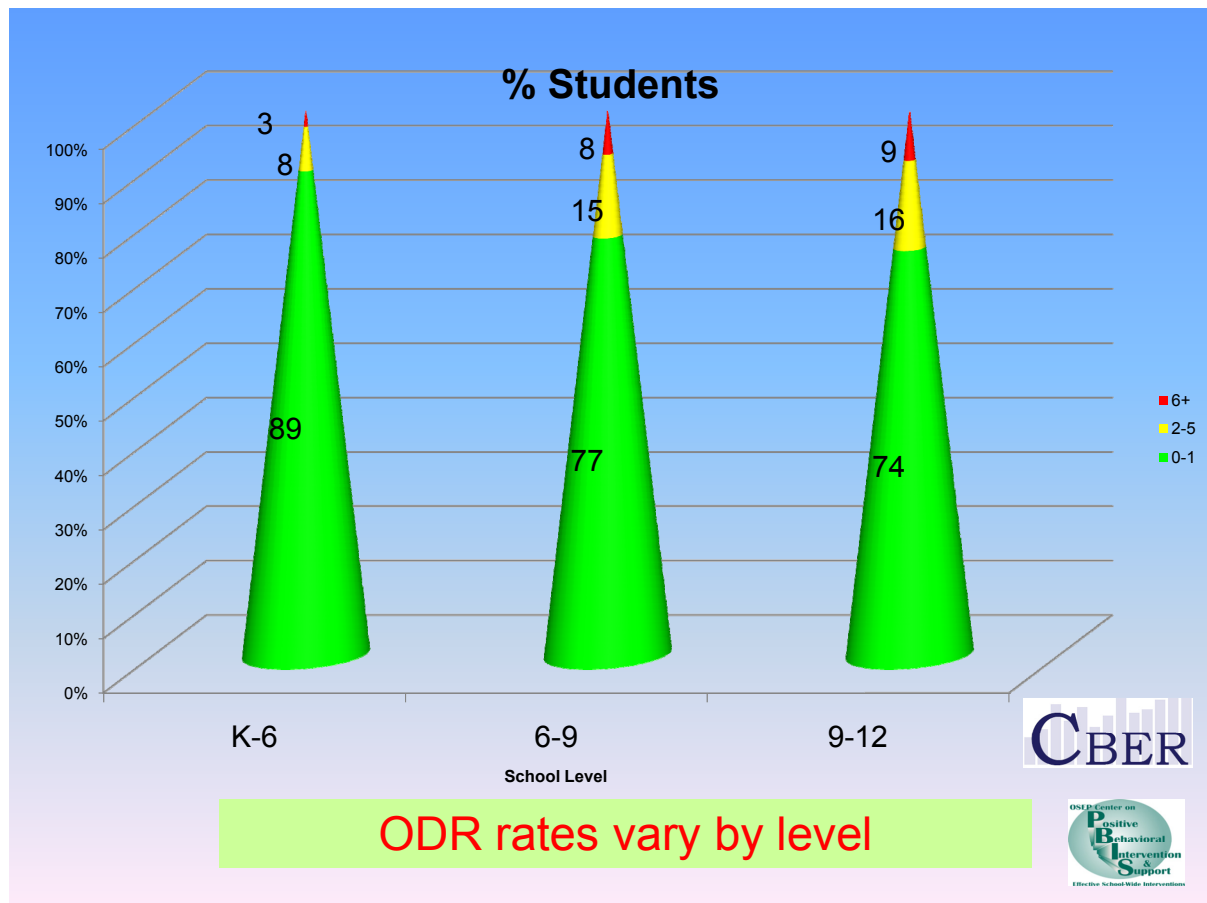


(Source: Center on Positive Behavioral Interventions and Supports, 2010)

ODR distributions from Connecticut schools using SWIS vary by grade level as well, but all grade ranges meet or are very similar to the national standards for referral distribution. Between 2007-2008 and 2009-2010, elementary schools (K-6) had a stable distribution of referrals, with 90% of students receiving 0-1 referrals, 7% of students receiving 2-5 referrals, and 3% of students receiving 6 or more (see Appendix B). This distribution is very similar to that seen nationally for elementary schools.

Connecticut middle schools (6-9) using SWIS had improved ODR distributions annually between 2007-2008 and 2009-2010. In 2009-2010, Connecticut middle schools reported 79% of students received 0-1 referrals, 13% of students received 2-5 referrals, and 8% of students received 6 or more referrals (see Appendix C). This distribution is also very similar to the national distribution for middle schools.

The Connecticut high schools (9-12) using SWIS had a less consistent distribution between 2007-2008 and 2009-2010; however, the most recent data is consistent with the national standards for high school referral distribution. In 2009-2010, Connecticut high schools reported 73% of students received 0-1 referrals, 17% received 2-5 referrals, and 9% received 6 or more (See Appendix D). Although national data comparisons are not available for schools grades K-(8-12), Connecticut data for these schools has remained stable between 2007-2008 and 2009-2010 and looks analogous to the elementary school distribution. In 2009-2010, Connecticut K-(8-12) schools reported 86% of students received 0-1 referrals, 9% received 2-5 referrals, and 5% received 6 or more referrals. (See Appendix E.)

**Impact Data**
ODR distribution data can also be used to highlight the effect of SWPBIS implementation on student referral rates. As stated previously, in Connecticut, schools are evaluated annually using the School-wide Evaluation Tool (SET). Data from the SET measure implementation fidelity of the following features of SWPBIS at the universal level: expectations defined; behavioral expectations taught; ongoing system for rewarding behavioral expectations; system for responding to behavioral violations; monitoring and decision making; management; and district-level support. Schools scoring 80% for "expectations taught" and 80% for an overall average are said to have "met SET" or to be implementing to criterion. Using data from trained schools evaluated using the SET and using SWIS, we compared referral rates in schools implementing SWPBIS to criterion, and rates in schools not implementing to criterion.

In 2009-2010, SWPBIS impact data varied considerably by grade level and school type. Elementary schools (K-6) had almost identical referral distributions, with 90% of students receiving 0-1 referrals in both schools implementing to criterion and those that did not meet SET (see Appendix F). Although the sample of schools is small, middle schools (6-9) had slightly different referral distributions, with schools implementing to criterion having a larger number of students receiving 0-1 referrals (85%) versus schools that hadn't met SET (82%). In schools meeting SET, 10% of students received 2-5 referrals and 5% of students received 6 or more referrals compared to 13% and 5% respectively in schools that didn't meet SET (see Appendix G). High schools (9-12) in 2009-2010 also had a small sample size, but saw an opposite relationship between implementation and referral distribution. Schools implementing to criterion had 75% of their students with 0-1 referrals compared to 81% of students in schools that did not meet SET. In schools meeting SET, 17% of students received 2-5 referrals and 8% of students received 6 or more referrals compared to 13% and 6% respectively in schools that did not meet SET (see Appendix H). Although both of these distributions are better than the national goal distribution for high schools, schools that met SET would ideally see more students with only 0-1 referrals than those trained but not

implementing to criterion. Three alternative/juvenile justice schools contributed data to SWIS and were evaluated using the SET during 2009-2010. Of these three schools, two schools met SET and one did not. The resulting data distributions, representing a very small sample of schools, vary greatly. In the schools meeting SET, 93% of students received 0-1 referrals, 5% received 2-5 referrals, and 2% received 6 or more referrals. In the trained school not meeting SET, 63% of students received 0-1 referrals, while 32% of students received 2-5, and 4% of students received 6 or more (see Appendix I).

# Connecticut's Model Schools Project

The purpose of Connecticut's PBIS Model Schools Project is to recognize schools for successfully implementing school-wide systems for Positive Behavioral Interventions and Supports. Criteria are based on key features of PBIS implementation as outlined by the National Technical Assistance Center on Positive Behavioral Interventions and Supports and are consistent with the content, outcomes, and expectations of Connecticut's School-wide PBIS Training Series.

SERC, in collaboration with the CSDE, announced competitive grants in November 2006 for scaling-up evidence-based practices supported by the federal government's State Personnel Development Grants (SPDG) Program. Proposals were funded that met criteria for implementation of PBIS, demonstrated commitment to a district-wide plan for scaling-up participation in SWPBIS, and when the district agreed to participate in a partnership with another Connecticut district interested in scaling-up SWPBIS district-wide. Since 2006, four districts have participated in the SPDG project for Positive Behavioral Interventions and Supports: Colchester, Windham, Hebron, and Regional School District 1 (Housatonic Valley).

In fall 2009, schools from SPDG districts were invited to participate in Connecticut's first round of the PBIS Model Schools Project. The goal of the initial year of the Model Schools Project was to establish a process for identifying, supporting, and documenting Model PBIS Sites. The intent of building Model Sites was to promote the scaling-up of effective SWPBIS practices by providing a statewide audience the opportunity to directly observe and discuss the critical elements of SWPBIS implementation. In order to qualify to serve as a Model Site, schools were required to have: completed the three-year core-training series for SWPBIS by the end of the 2009-2010 school year; received a score of at least 80 for both expectations taught and for overall average on the SET during the most recent year; and be from a SPDG district. All model sites also met a comprehensive list of implementation expectations related to SWPBIS. Six schools participated in the project. Three schools were from the Colchester School District: Colchester Elementary School, Jack Jackter Intermediate School, and William J. Johnston Middle School. Two schools were from the Hebron School District: Hebron Elementary School and Gilead Hill Elementary School. The final participating school was Housatonic Valley Regional High School from Region 1. All six participating schools are examples of high-quality school-wide PBIS implementation and have maintained fidelity of implementation as measured by the SET between 2008 and 2010 (See appendix J). Five of the six schools have demonstrated improved student outcomes using the SWIS program (Gilead Hill School began using the program in 2009 and therefore does not have longitudinal data). (See Appendices K1, K2, K3, K4, and K5).

Close to three-quarters (71.1%) of the 2009-2010 PBIS Model Site Project visitors were teachers (general education and special education) and behavioral specialists (school psychologists, social workers, and guidance counselors), with general education teachers comprising the largest group at just over one-third (36.5%) of all visitors. Attendees were asked to report their general satisfaction with the site visit experience. When asked whether they would recommend the site

visit to someone else, 98.8% of respondents said "Yes," while the remaining 1.2% said "Don't Know" (see Figure AA). When asked if they would attend another visit themselves, 90.5% of the respondents said "Yes," 3.6% of respondents said "No," and 6% of respondents said "Don't Know" (see Figure AB).
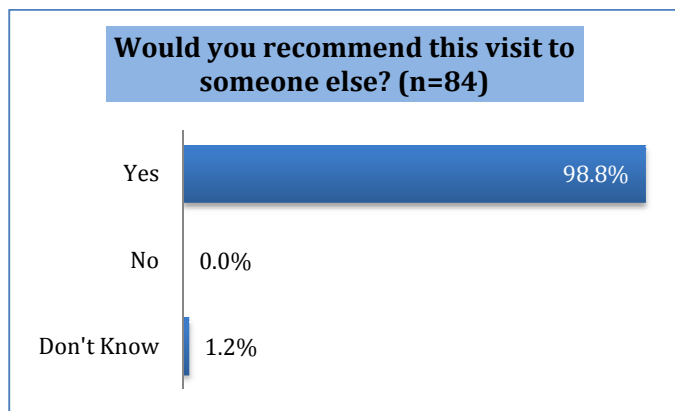


**Would you recommend this visit to someone else? (n=84)**

| | |
|---|---|
| Yes | 98.8% |
| No | 0.0% |
| Don't Know | 1.2% |

Figure AA  (Glen Martin Associates, 2010)



**Would you attend another site visit? (n=84)**

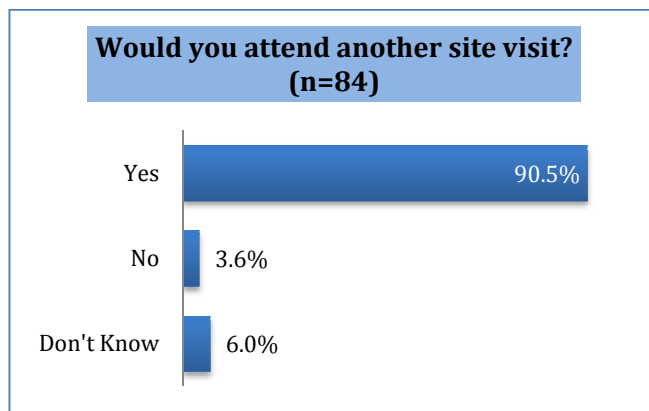| | |
|---|---|
| Yes | 90.5% |
| No | 3.6% |
| Don't Know | 6.0% |

Figure AB  (Glen Martin Associates, 2010)

Responses to whether a visitor's school was currently implementing SWPBIS were fairly evenly split, with 48.1% (n=38) of visitors indicating their school *was* implementing SWPBIS, and 51.9% (n=41) of visitors indicating their school *was not* implementing SWPBIS. A comparison of each group's self-rated knowledge of SWPBIS *prior* to the visit revealed 44.7% (n=17) of visitors from PBIS schools rated their knowledge as "strong" or "advanced." Conversely, roughly the same percentage 48.8% (n=20) of visitors from non-PBIS schools rated their knowledge as "none" or "introductory" (see Figure AC).



**How would you rate your knowledge of SW-PBS prior to today's visit?**

Respondents from **PBS** Schools (n=38)

| Self-Rated Knowledge | |
|---|---|
| Advanced | 10.5% |
| Strong | 34.2% |
| Good | 42.1% |
| Intro | 13.2% |
| None | 0.0% |

44.7% (Advanced + Strong)

Respondents from **non-PBS** Schools (n=41)

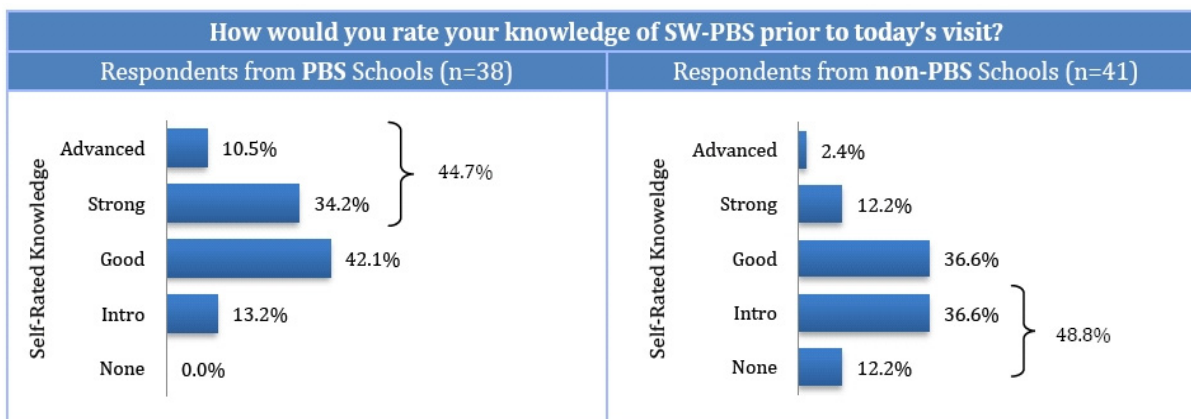| Self-Rated Knowledge | |
|---|---|
| Advanced | 2.4% |
| Strong | 12.2% |
| Good | 36.6% |
| Intro | 36.6% |
| None | 12.2% |

48.8% (Intro + None)

Figure AC  (Glen Martin Associates, 2010)

This comparison includes only those respondents (n=79) who answered all three questions examined in this section of the participant evaluations (1. Is your school currently implementing SW-PBS? ; 2. How would you rate your knowledge of SW-PBS prior to today's visit? ; 3. How would you rate your knowledge of SW-PBS after today's visit?). The same comparison of pre-post self-rated knowledge between visitors from *districts* implementing or not implementing SWPBIS was also done, but the results were almost identical to the school-level comparison, and therefore were not presented here.
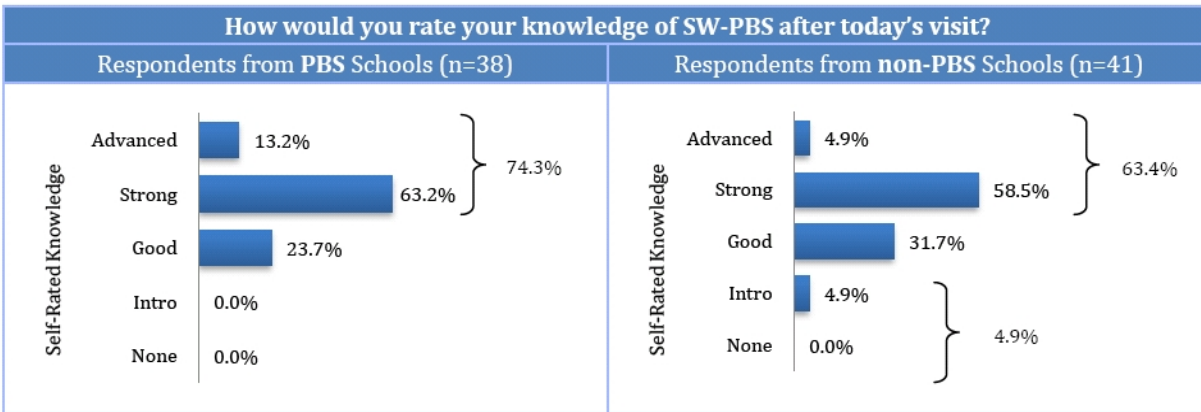
Figure AD  (Glen Martin Associates, 2010)

The pilot year of Connecticut's PBIS Model Schools Project laid the foundation for a statewide system for identifying demonstration sites. During 2010-2011, the Project will announce opportunities for schools to receive two award levels. The first level will recognize schools that are implementing SWPBIS with fidelity as measured by the SET, and that are seeing improved behavioral outcomes as a result of implementation. These schools will be called *Banner Schools* and will be highlighted at statewide events, on the SERC PBIS Web site, and in PBIS publications.

The second level will celebrate schools that are implementing SWPBIS with high fidelity as measured by the SET, that are seeing improved behavioral outcomes as a result of implementation, and that are prepared to serve as a *Model Demonstration Site*. These schools will open their doors to interested visitors and will share and celebrate their success at statewide events, on the SERC PBIS Web site, and in PBIS publications. Awarded *Model Demonstration Sites* will host a minimum of four site visits during the school year for external visitors interested in learning about PBIS. Schools interested in being identified as a *Banner School* or *Model Demonstration Site* for 2010-2011 should request more information about the Model Schools Project from SERC.

# Becoming Involved in PBIS Training

A new cohort of schools begins the Training Series in the fall of each school year. Districts and schools interested in participating in the Training Series begin the planning and application process during the winter preceding their first year of training. Superintendents and principals are required to attend an informational session held in winter in order to begin the process of applying to participate in the following school-year's cohort. It is strongly suggested that schools and districts spend nine months preparing for SWPBIS prior to attending the training. Interested schools and districts should contact SERC immediately to receive additional information about informational meetings, the application process, and anticipated openings in the next training cohort.

District commitment is required in order for schools to participate in the training series. District commitments include the assignment of a district coordinator and coach; the creation and maintenance of a district team; and district-wide roll-out of PBIS over a determined schedule of time. Individual schools must also determine if PBIS is a good fit for their school. Once a school obtains an 80% approval rate from faculty and staff, has administrative approval, and has met other readiness requirements, the school may apply to join a training cohort.

The full training series consists of three years of team and coaches' training and required evaluation. Schools committing to the development of a continuum of support for behavior

participate in at minimum 12 days of core school-team training, nine school-based coaches' events, and additional evaluation events held throughout the three years. Supplemental training is available based on school readiness and registration. Full district commitment is required for school training to occur, and schools must participate in the full three-year Training Series as designed.

SERC uses the National Technical Assistance Center on PBIS' School-wide PBIS Workbook and associated resources as the foundation and core curriculum for Connecticut's PBIS Training Series. Schools participating in the PBIS Training Series through SERC commit to a three-year training process. The first year of training includes planning implementation of a primary tier of prevention. During the first year of training, schools focus on the following components:

- *Establishing a Leadership Team*
- *Developing a Statement of Behavior Purpose*
- *Identifying Positive School-wide Behavioral Expectations*
- *Developing Procedures for Teaching School-wide Behavioral Expectations*
- *Developing Procedures for Teaching Classroom-wide Behavioral Expectations*
- *Developing a Continuum of Procedures for Encouraging and Strengthening Student Use of School-wide Behavioral Expectations*
- *Developing a Continuum of Procedures for Discouraging Student Behavioral Violations of School-wide Behavioral Expectations*
- *Developing Data-based Procedures for Monitoring Implementation of SWPBIS*


During the second training year, schools focus on implementation of the primary prevention tier components and enhancing classroom and non-classroom setting supports, including classroom management, active-monitoring, and prevention of behavior escalation; and engaging families.

During the final year of the PBIS Training Series, schools establish systems and processes for supporting small groups and individual students with secondary and tertiary prevention practices and interventions. Teams focus on sustaining core implementation while identifying and establishing practices at the secondary and tertiary tier.

Schools are provided with general guidance on the implementation process but are encouraged to implement at a pace that is appropriate and tailored to the needs of the school and staff. All schools are expected to maintain an action plan and use the integrated elements to support ongoing decision making and data review.

Participating schools are required to submit evaluations on a regular basis and to identify two team members to serve as coaches. School-based coaches attend additional coaches' training throughout the Training Series to support them in their specialized role.

# Summary

Positive Behavioral Interventions and Supports involves a proactive, comprehensive, and systemic continuum of support designed to provide opportunities to all students to achieve social, behavioral, and learning success. The Connecticut State Department of Education (CSDE), through the State Education Resource Center (SERC), has been providing training, technical assistance, coaching, and evaluation to Connecticut school districts since 2000.  This is what we know based on the implementation of PBIS during 2009-2010:

- The growth of PBIS in Connecticut has required the rapid establishment of a comprehensive approach for supporting schools and districts with training, coaching, evaluation, and the other critical features of a statewide system as outlined by the Center on Positive Behavioral Interventions and Supports. Sustaining the momentum of Connecticut's PBIS project will require extensive coordination and collaboration.
- Model Sites offer a professional development opportunity for visitors. During fall 2009-2010, six Connecticut schools were identified as Model Sites for School-wide PBIS implementation. During winter and spring 2010, the Model Sites hosted 12 open-house site visit opportunities attended by 105 education professionals from 31 districts. Visitors reported a substantial growth in learning as a result of the visits.
- Since 2000, 201 schools from 30 districts have been trained in SWPBIS.
- In spring 2010, 98 schools were evaluated using the School-wide Evaluation Tool (SET); this was the largest number of SETs ever conducted in a single year in Connecticut. Of the 98 schools evaluated, 32 schools, or 33%, were year 1 schools that were still in their planning year and served as a baseline. Of the 66 schools in year 2 and beyond, 63% were implementing to criterion.
- Defiance/Disrespect/Insubordination/Non-Compliance was the most common behavioral infraction in middle and high schools using SWIS.
- Fighting/Physical Aggression was the most common behavioral infraction in grades K-6.
- Data at all grade levels in PBIS schools using SWIS demonstrate that the classroom was the most common location for behavioral infractions.
- Data at all grade levels in PBIS schools using SWIS demonstrate that males were more likely to receive referrals.
- Data at all grade levels in PBIS schools using SWIS demonstrate Latino students were consistently over-referred, while White students were consistently under-referred compared to their proportion of the population as a whole.
- Data from Connecticut PBIS schools using SWIS show overall decreases in major referral rates between 2007-2008 and 2009-2010 for 6-9, 9-12, and K-(8-12) schools. Elementary schools (K-6) had a very small increase, from .36 average referrals per 100 students per day to .37 average referrals per 100 students per day in 2009-2010. All grade ranges saw decreases in combined major and minor office discipline referrals.
- Overall, office discipline referral rates (referrals per 100 students per day) from Connecticut schools using SWIS compare favorably with the national averages. ODR distribution data from Connecticut schools using SWIS vary by grade level, but all grade ranges meet or are very similar to the national standards for referral distribution.
- Impact data from SWPBIS implementation varied by grade range. When comparing schools implementing SWPBIS to criterion and trained schools not implementing to

criterion, elementary schools (K-6) had almost identical referral distributions; middle schools (6-9) had slightly different referral distributions, with schools implementing to criterion having improved referral distributions; while high schools (9-12) had an opposite relationship between implementation and referral distribution.

# Connecticut PBIS Three-Year Goals

The three-year goals for Connecticut's statewide system for PBIS include:

- Expanding the Connecticut PBIS Collaborative, a statewide comprehensive stakeholder group, that invests in systems for training, coaching, and evaluation to address the growing demand for training and scaling-up in Connecticut districts;

- Expanding the Connecticut Model Schools Project to include identification of Banner Schools and Model Demonstration Sites;

- Building capacity in school-wide PBIS trainers through the extension of the PBIS Trainer of Trainers Network;

- Enhancing and building capacity for providing district-specific assistance in the development and management of secondary and tertiary behavior support systems and expertise of local personnel;

- Investigating further the local relationship between SWPBIS and academic outcomes;

- Identifying further a static funding source for scaling-up efforts;

- Providing evidence-based content and materials to develop interventions to address systemic disproportionality in suspension and expulsion by race and other sub-groups;

- Collaborating with PBIS school districts to address the discipline gap by gender, race, and special education;

- Sharing Connecticut data with PBIS schools to examine function of behavior and its correlation to the most common behavioral infractions in middle and high schools (defiance/disrespect/insubordination, etc.);

- Enhancing the visibility of PBIS in Connecticut through the Summit on PBIS Web site, and related products; and

- Investing in the increased knowledge about PBIS with Connecticut families through the Connecticut Parent Information and Resource Center (CT PIRC).
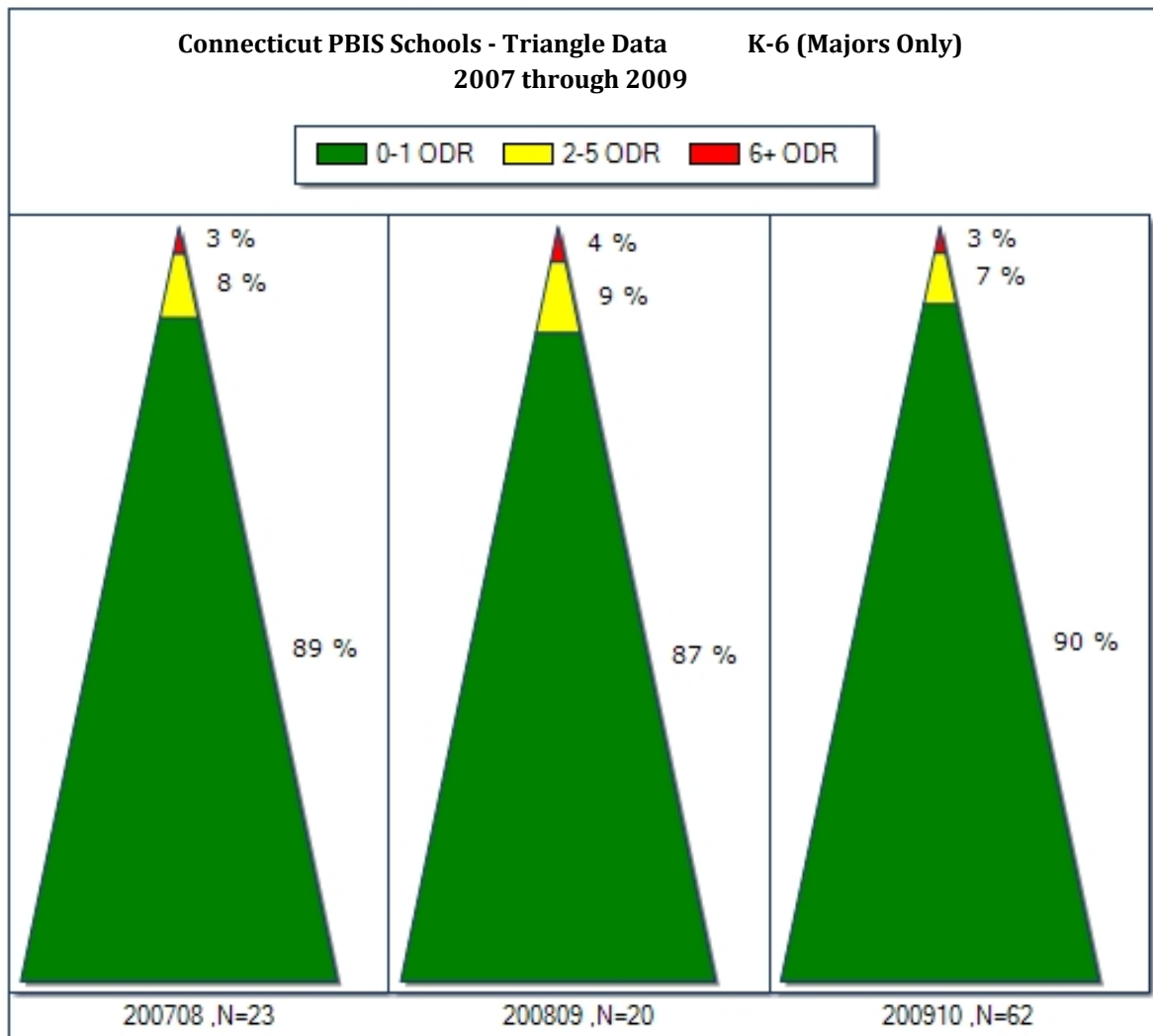
# Appendix A:
## History of PBIS in Connecticut



34
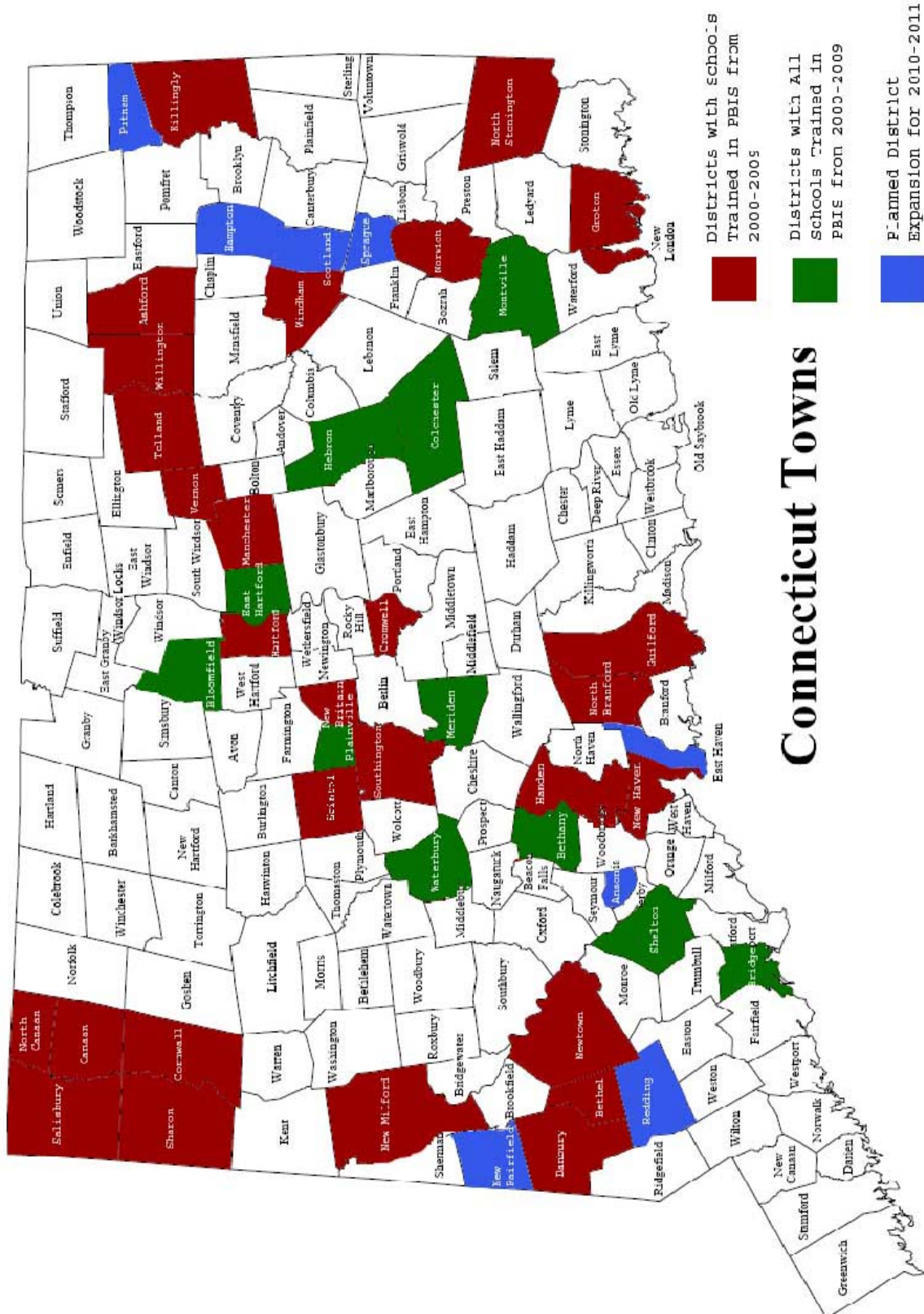
# Major Referral Distribution Triangles, K-6, 2007-2008 and 2009-2010

**K-6**

**Majors**

| | 0-1 ODR | 2-5 ODR | 6+ ODR |
|---|---|---|---|
| 200708 ,N=23 | 0.89 | 0.08 | 0.03 |
| 200809 ,N=20 | 0.87 | 0.09 | 0.04 |
| 200910 ,N=62 | 0.90 | 0.07 | 0.03 |

**Connecticut PBIS Schools - Triangle Data      K-6 (Majors Only)**
**2007 through 2009**

Legend: ■ 0-1 ODR   □ 2-5 ODR   ■ 6+ ODR

200708 ,N=23: 3 %, 8 %, 89 %

200809 ,N=20: 4 %, 9 %, 87 %

200910 ,N=62: 3 %, 7 %, 90 %

**Source: www.pbseval.org**
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.
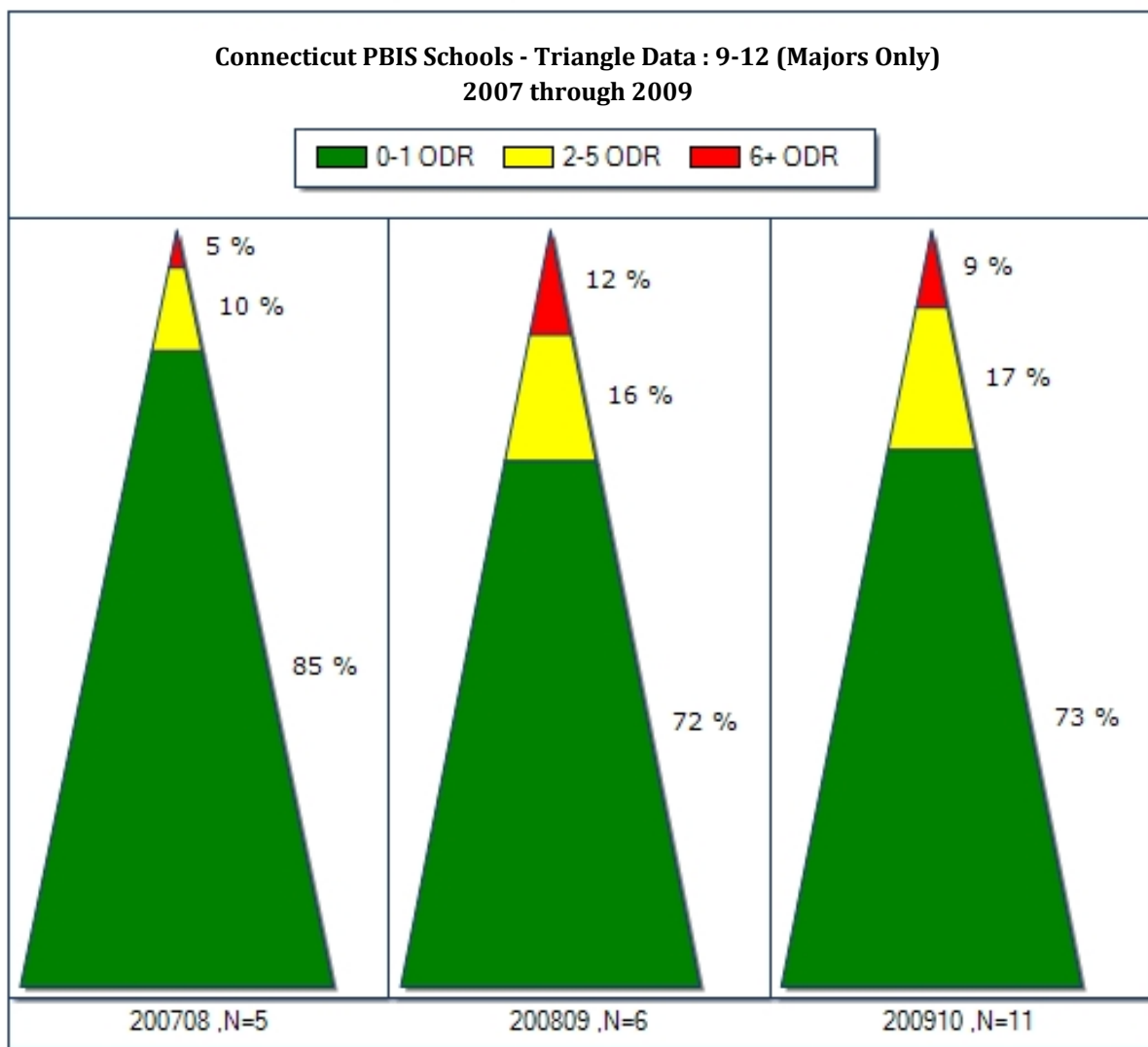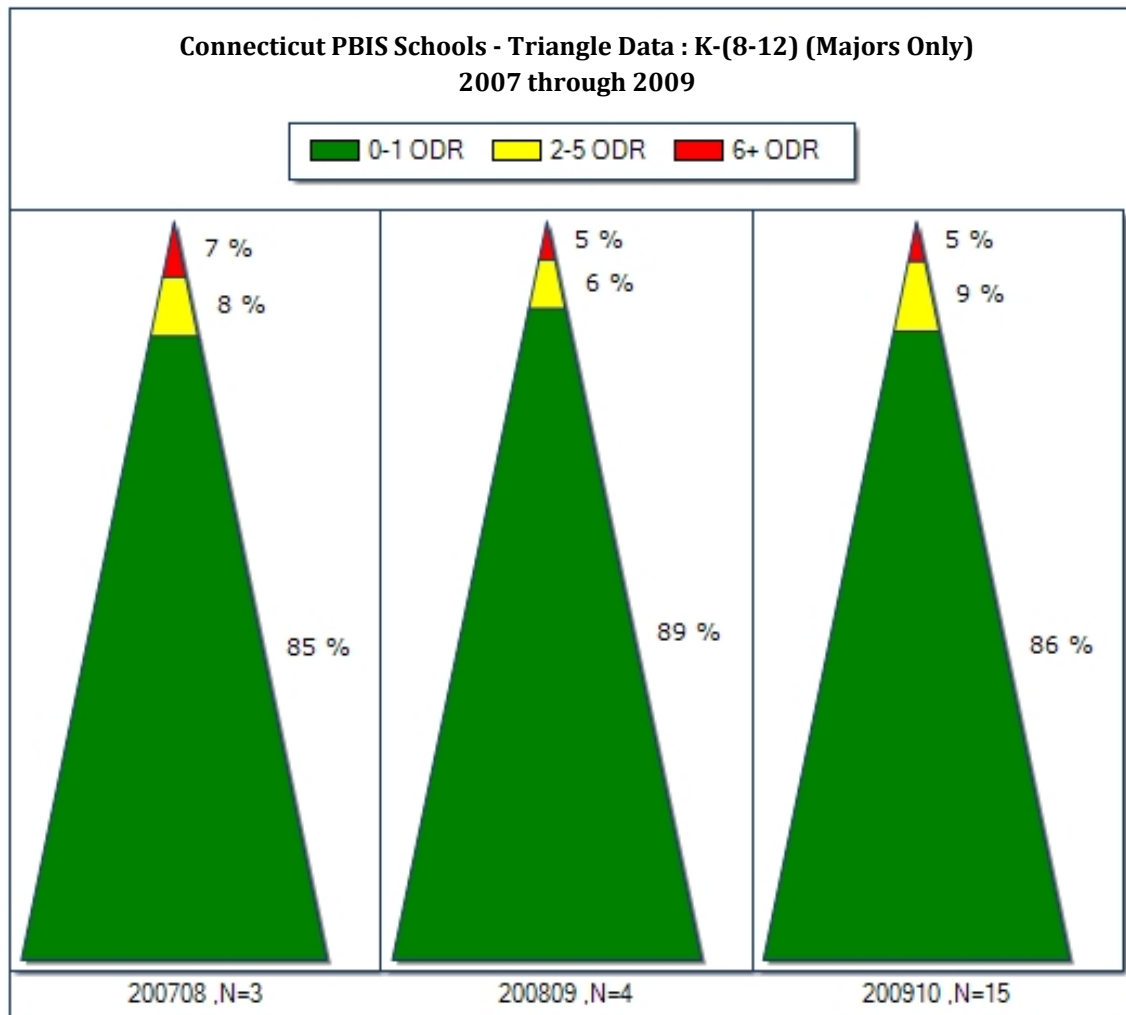


# Major Referral Distribution Triangles, 6-9, 2007-2008 and 2009-2010

6-9
_____

**Majors**

| | 0-1 ODR | 2-5 ODR | 6+ ODR |
|---|---|---|---|
| 200708 ,N=6 | 0.72 | 0.16 | 0.12 |
| 200809 ,N=6 | 0.75 | 0.15 | 0.10 |
| 200910 ,N=10 | 0.79 | 0.13 | 0.08 |
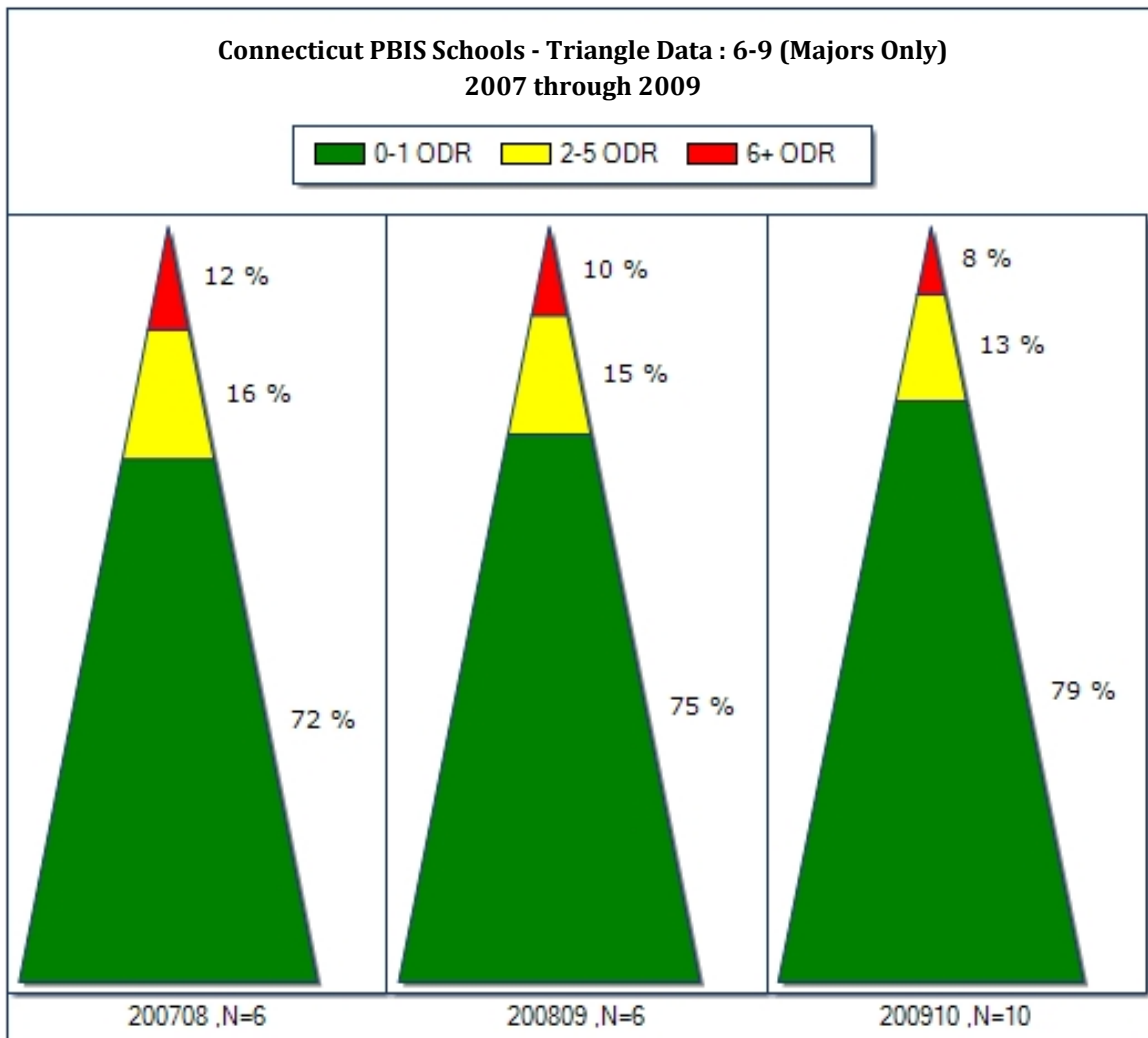
**Connecticut PBIS Schools - Triangle Data : 6-9 (Majors Only)**
**2007 through 2009**

Legend: 0-1 ODR (green), 2-5 ODR (yellow), 6+ ODR (red)

| 200708 ,N=6 | 200809 ,N=6 | 200910 ,N=10 |
|---|---|---|
| 12 % / 16 % / 72 % | 10 % / 15 % / 75 % | 8 % / 13 % / 79 % |

# Major Referral Distribution Triangles, 9-12, 2007-2008 & 2009-2010

**9-12**

**Majors**

| | | | |
|---|---|---|---|
| 200708 ,N=5 | 0-1 ODR | 2-5 ODR | 6+ ODR |
| | 0.85 | 0.10 | 0.05 |
| 200809 ,N=6 | 0-1 ODR | 2-5 ODR | 6+ ODR |
| | 0.72 | 0.16 | 0.12 |
| 200910 ,N=11 | 0-1 ODR | 2-5 ODR | 6+ ODR |
| | 0.73 | 0.17 | 0.09 |

**Connecticut PBIS Schools - Triangle Data : 9-12 (Majors Only)**
**2007 through 2009**

■ 0-1 ODR    □ 2-5 ODR    ■ 6+ ODR



| 200708 ,N=5 | 200809 ,N=6 | 200910 ,N=11 |

5 %
10 %
85 %

12 %
16 %
72 %

9 %
17 %
73 %

**Source: www.pbseval.org**
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

# Major Referral Distribution Triangles, K-(8-12), 2007-2008 and 2009-2010

**K8-12**

**Majors**

| | 0-1 ODR | 2-5 ODR | 6+ ODR |
|---|---|---|---|
| 200708 ,N=3 | 0.85 | 0.08 | 0.07 |
| 200809 ,N=4 | 0.89 | 0.06 | 0.05 |
| 200910 ,N=15 | 0.86 | 0.09 | 0.05 |

**Connecticut PBIS Schools - Triangle Data : K-(8-12) (Majors Only)**
**2007 through 2009**

Legend: 0-1 ODR (green), 2-5 ODR (yellow), 6+ ODR (red)

| 200708 ,N=3 | 200809 ,N=4 | 200910 ,N=15 |
|---|---|---|
| 7 % / 8 % / 85 % | 5 % / 6 % / 89 % | 5 % / 9 % / 86 % |

**Source: www.pbseval.org**
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

# Referral Distribution Schools Implementing PBIS to Criterion versus Schools Not Implementing to Criterion, K-6, 2009-2010

**Connecticut Department of Education - K-6**

200910

Majors Only

| Not Met SET ,N=22 | 6+ | 2-5 | 0-1 |
|---|---|---|---|
| | 0.05 | 0.06 | 0.90 |
| Met SET ,N=21 | 6+ | 2-5 | 0-1 |
| | 0.04 | 0.07 | 0.90 |

**Connecticut PBIS Schools - Triangle Data : K-6 (Majors Only) - SET**
**2009-2010**
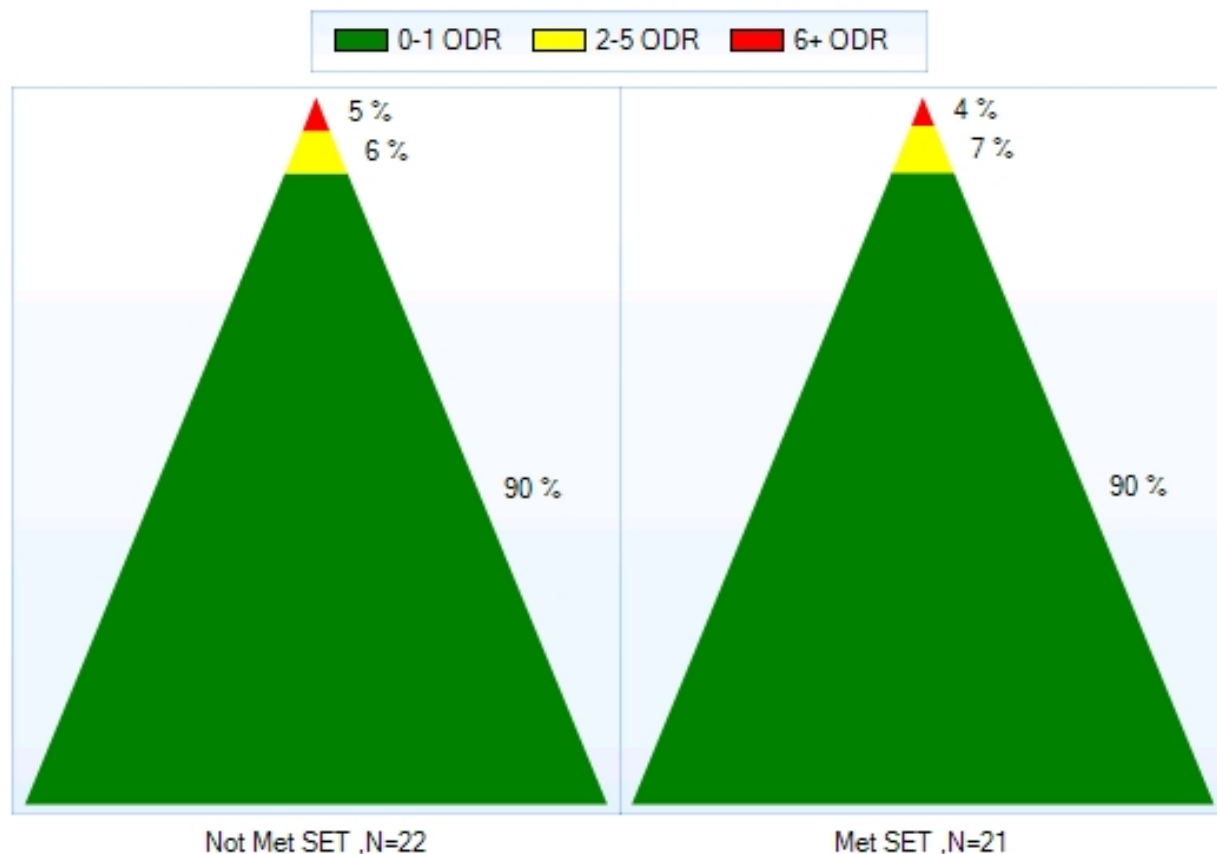


Source: www.pbseval.org
A score of 80/80 (80 for Expectations Taught and 80 for Overall Average) is considered implementing with fidelity (Sprague & Walker, 2005).
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

# Referral Distribution Schools Implementing PBIS to Criterion versus Schools Not Implementing to Criterion, 6-9, 2009-2010

## Connecticut Department of Education - 6-9

200910

Majors Only

| Not Met SET ,N=1 | 6+ | 2-5 | 0-1 |
|---|---|---|---|
| | 0.05 | 0.13 | 0.82 |
| Met SET ,N=6 | 6+ | 2-5 | 0-1 |
| | 0.05 | 0.10 | 0.85 |

**Connecticut PBIS Schools - Triangle Data : 6-9 (Majors Only) - SET**
**2009-2010**
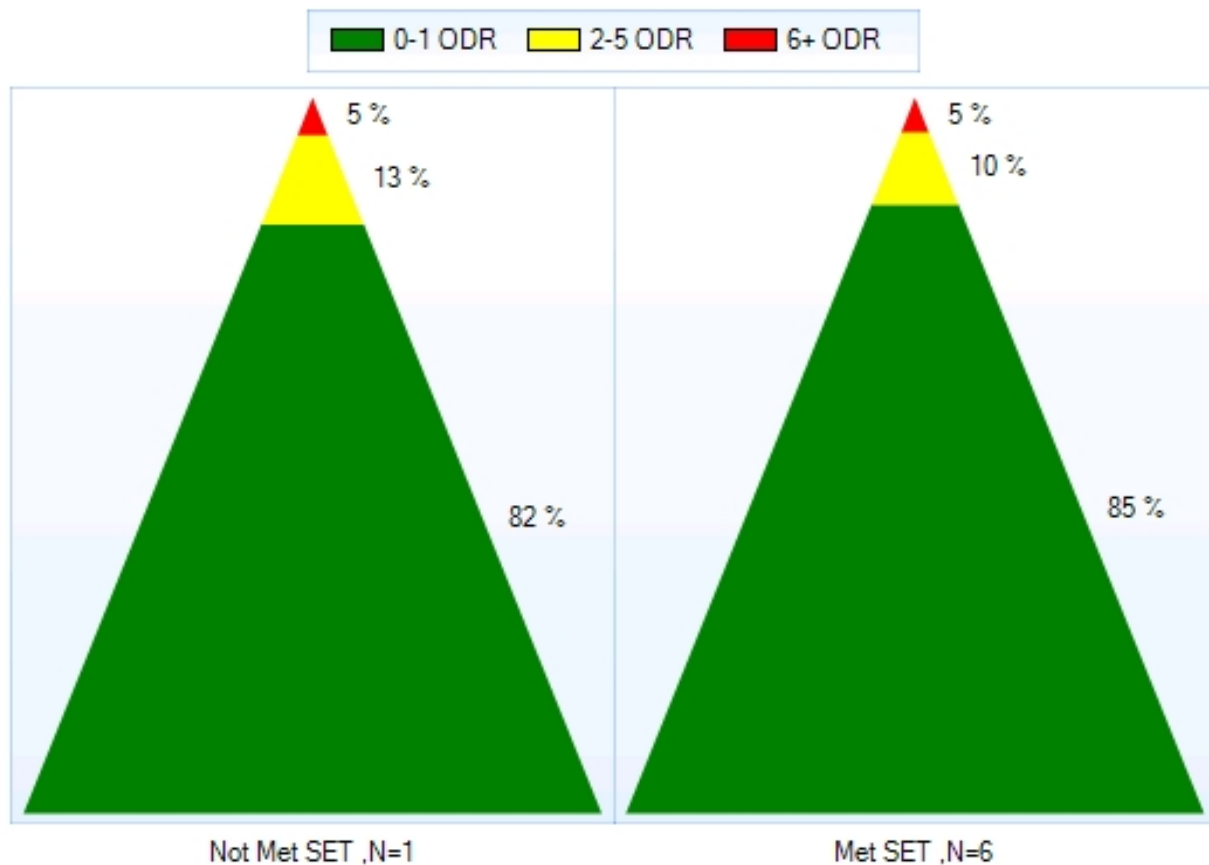


Source: www.pbseval.org
A score of 80/80 (80 for Expectations Taught and 80 for Overall Average) is considered implementing with fidelity (Sprague & Walker, 2005).
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

# Referral Distribution Schools Implementing PBIS to Criterion versus Schools Not Implementing to Criterion, 9-12, 2009-2010

## Connecticut Department of Education - 9-12

200910

Majors Only

| Not Met SET ,N=5 | 6+ | 2-5 | 0-1 |
|---|---|---|---|
| | 0.06 | 0.13 | 0.81 |
| Met SET ,N=3 | 6+ | 2-5 | 0-1 |
| | 0.08 | 0.17 | 0.75 |

### Connecticut PBIS Schools - Triangle Data : 9-12 (Majors Only) - SET
### 2009-2010
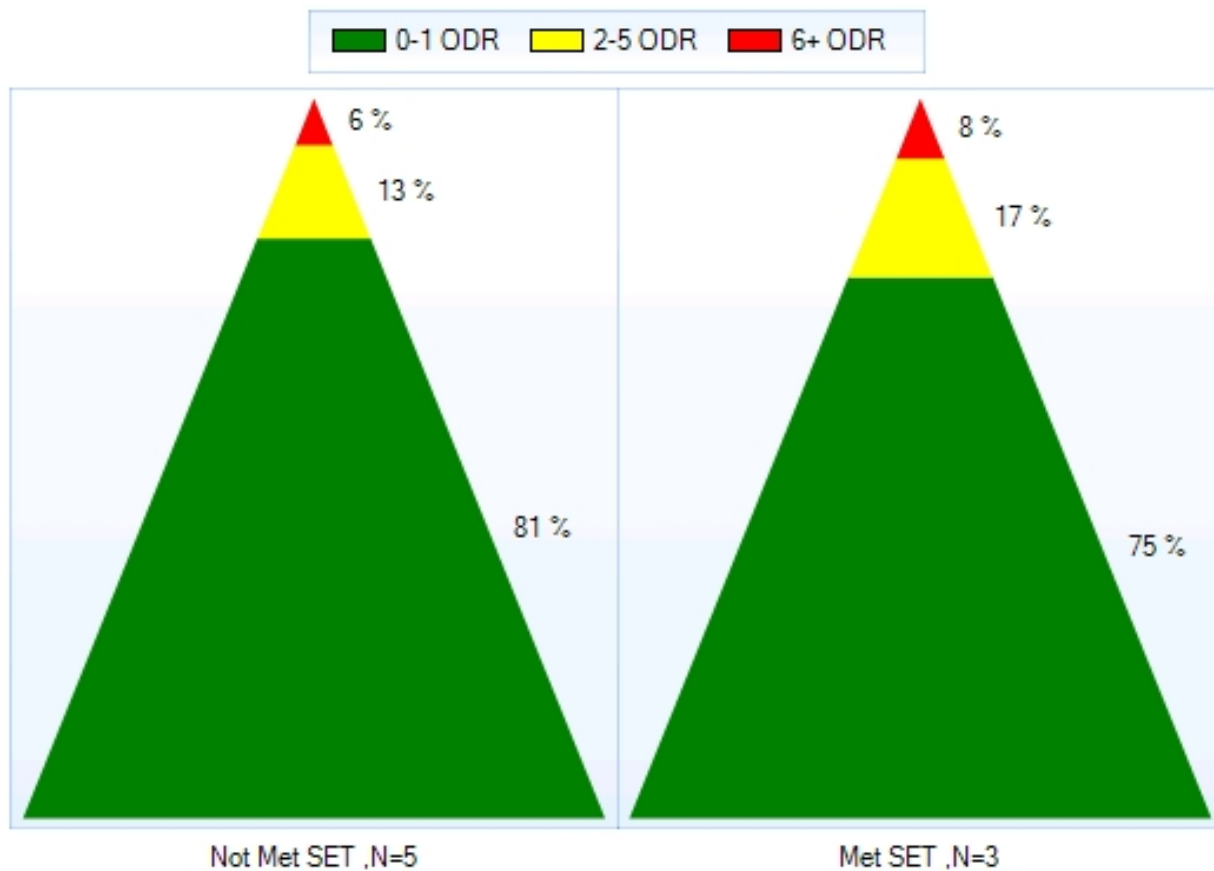


Source: www.pbseval.org
A score of 80/80 (80 for Expectations Taught and 80 for Overall Average) is considered implementing with fidelity (Sprague & Walker, 2005).
Figure represents data only from schools using the SWIS system or pbssurveys.org and is not representative of all PBIS-trained schools.

# Referral Distribution Schools Implementing PBIS to Criterion versus Schools Not Implementing to Criterion, Alternative/Juvenile Justice, 2009-2010
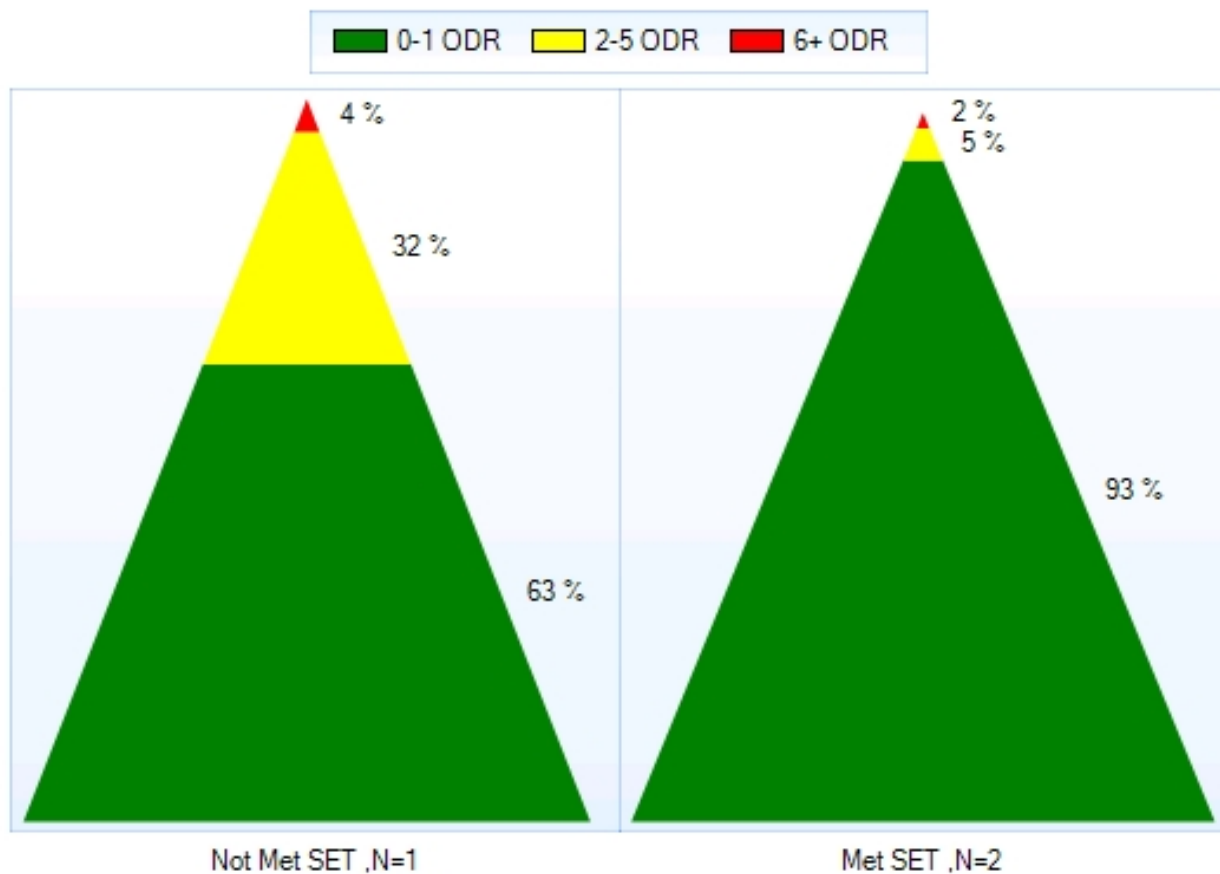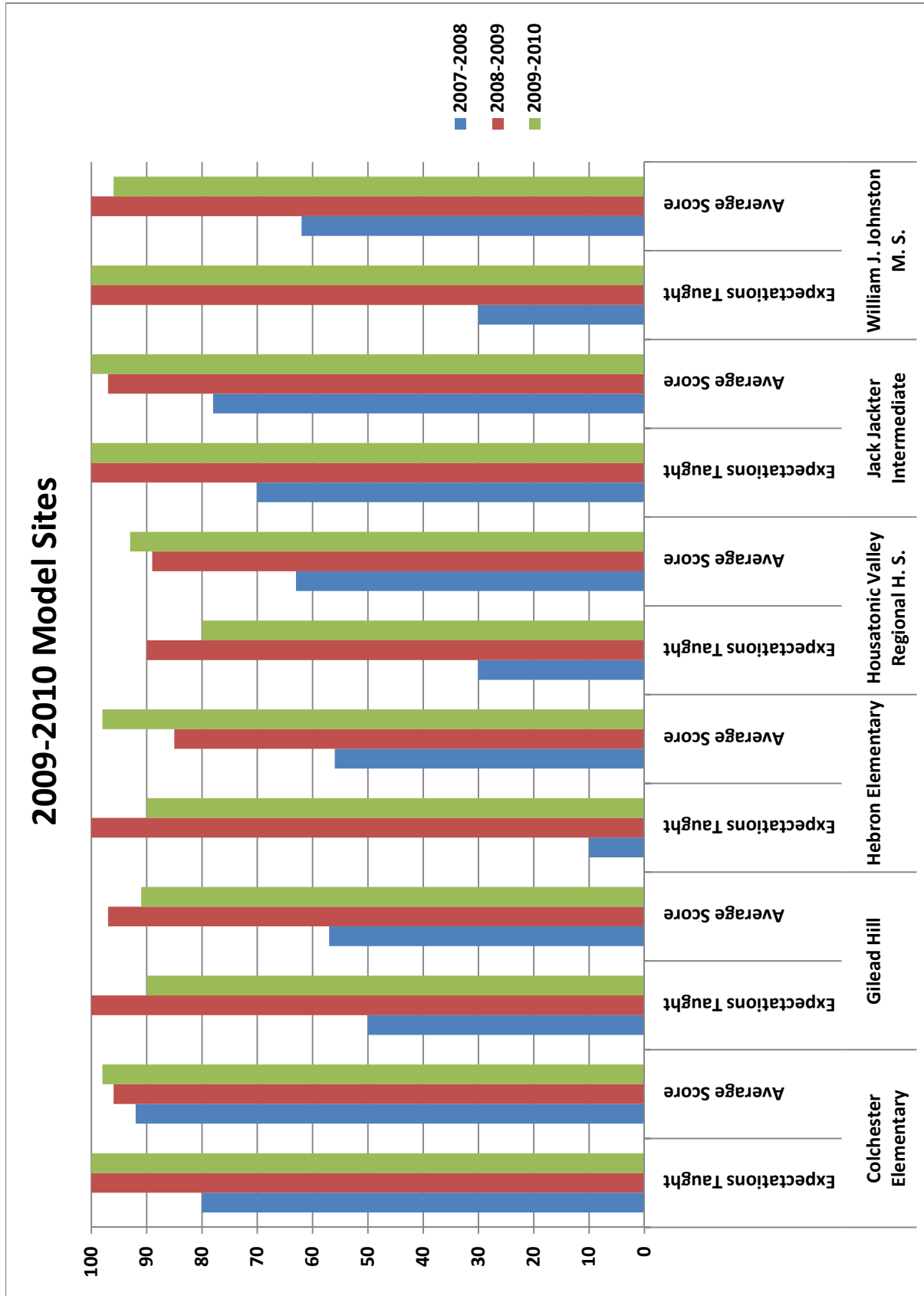
## Connecticut Department of Education - Alt/JJ

200910

Majors Only

| Not Met SET ,N=1 | 6+ | 2-5 | 0-1 |
|---|---|---|---|
| | 0.04 | 0.32 | 0.63 |
| Met SET ,N=2 | 6+ | 2-5 | 0-1 |
| | 0.02 | 0.05 | 0.93 |

**Connecticut PBIS Schools - Triangle Data : Alt/JJ (Majors Only) - SET
2009-2010**

# Model Site Evidence of Sustainability



## 2009-2010 Model Sites

Legend:
- 2007-2008
- 2008-2009
- 2009-2010

Categories (left to right):
- Colchester Elementary — Expectations Taught, Average Score
- Gilead Hill — Expectations Taught, Average Score
- Hebron Elementary — Expectations Taught, Average Score
- Housatonic Valley Regional H. S. — Expectations Taught, Average Score
- Jack Jackter Intermediate — Expectations Taught, Average Score
- William J. Johnston M. S. — Expectations Taught, Average Score

Y-axis: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

A score of 80/80 (80 for Expectations Taught and 80 for Overall Average) is considered implementing with fidelity (Sprague & Walker, 2005).

Source: www.swis.org

## Appendix K1
## Sustained Outcomes in Model Sites: Referral Data
## - Colchester Elementary School
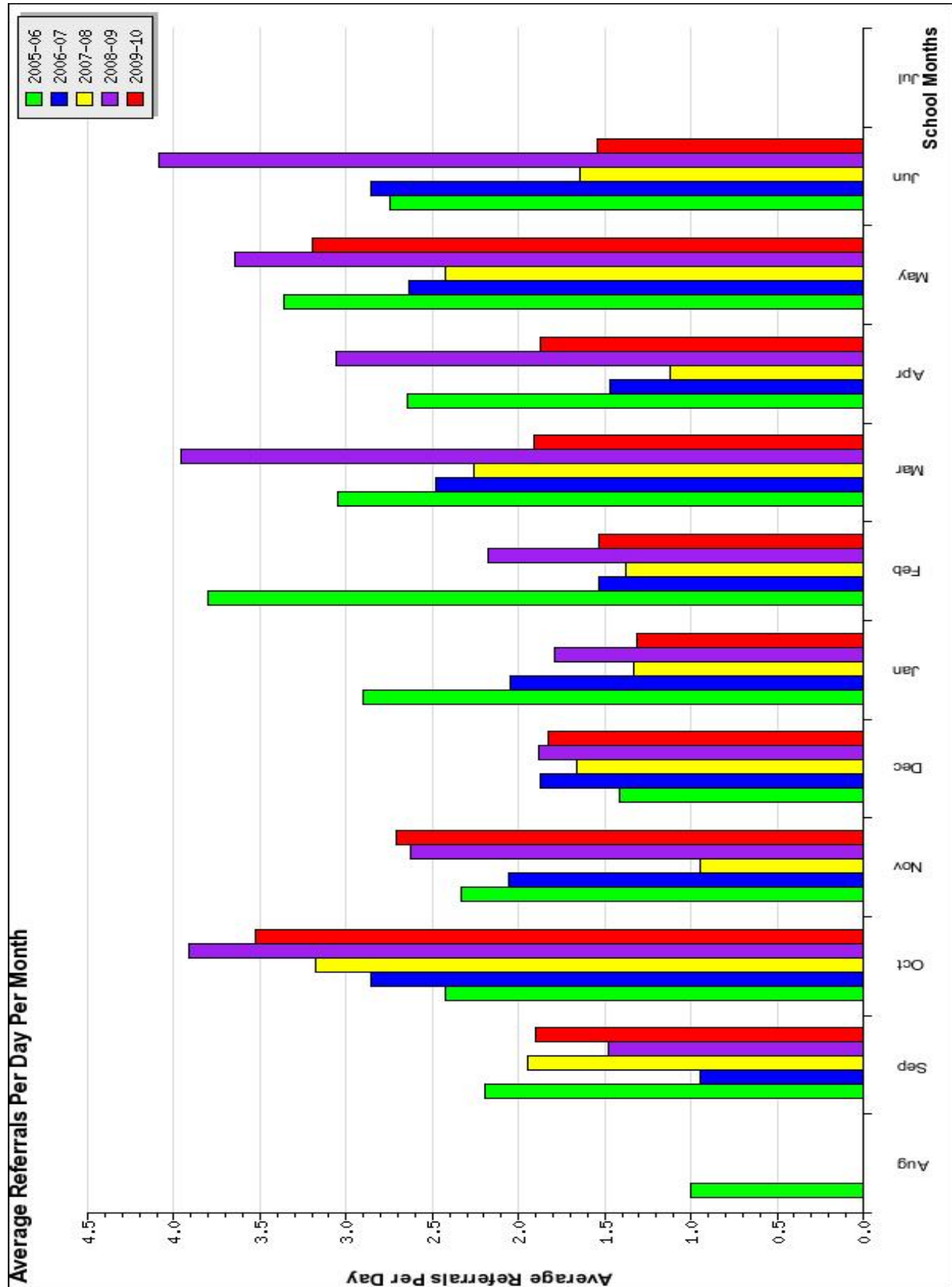
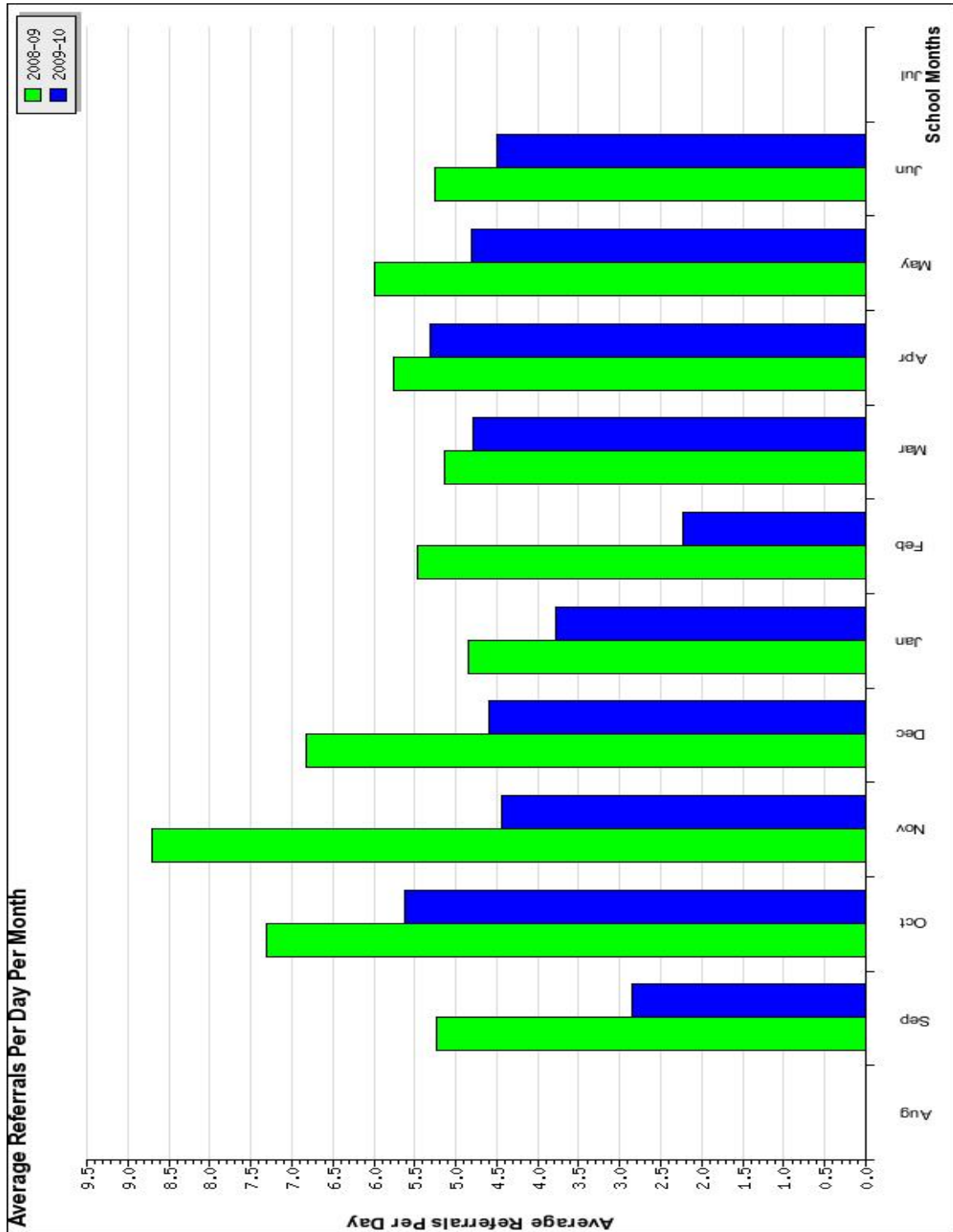

Source: www.swis.org

**Appendix K2**
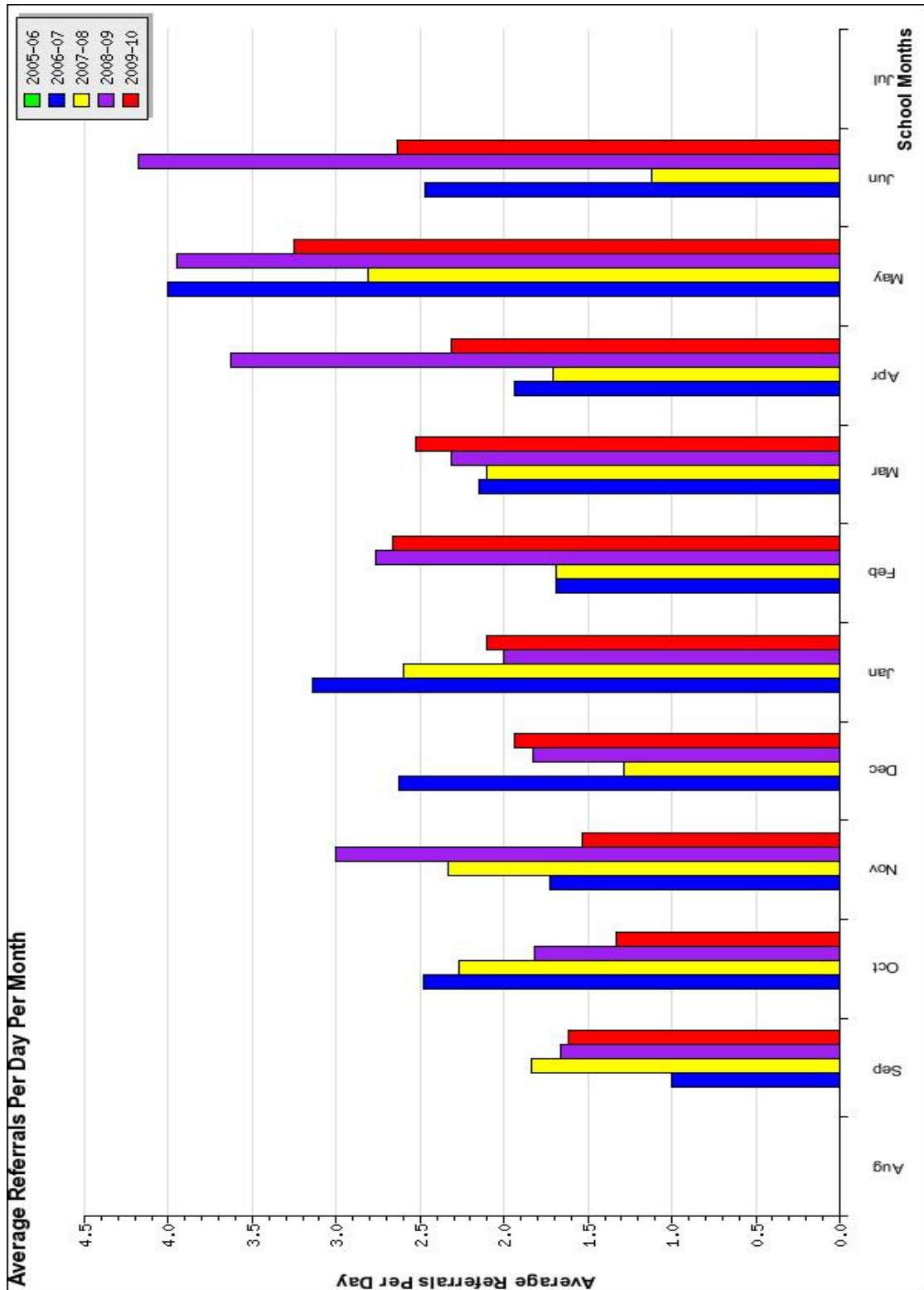**Sustained Outcomes in Model Sites: Referral Data**
**- Hebron Elementary School**

Source: www.swis.org

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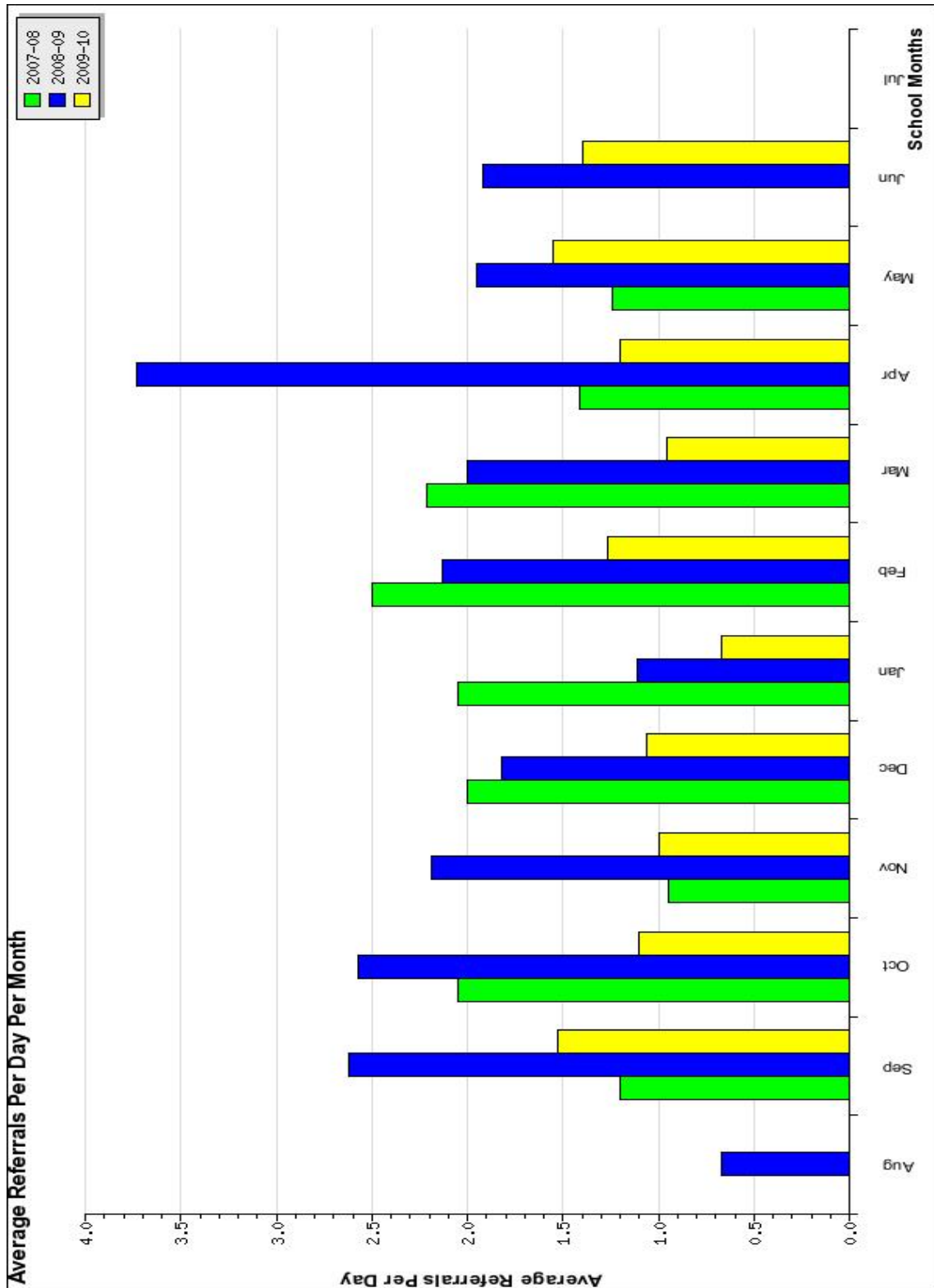
# Appendix K3
## Sustained Outcomes in Model Sites: Referral Data
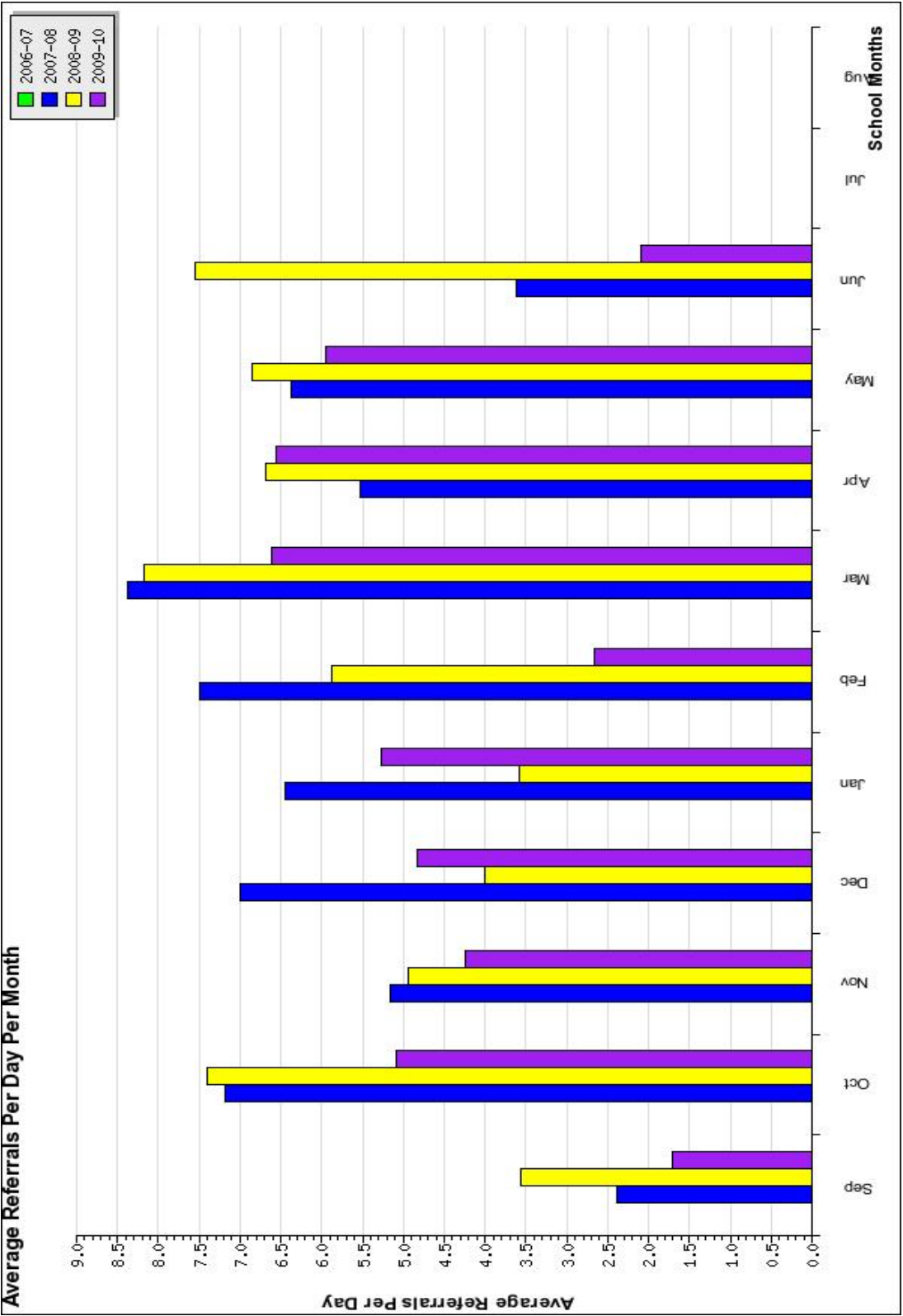## - Housatonic Valley Regional High School



**Average Referrals Per Day Per Month**

Source: www.swis.org

**Appendix K4**
**Sustained Outcomes in Model Sites: Referral Data**
**- Jack Jackter Intermediate School**

Source: www.swis.org

# Appendix K5
## Sustained Outcomes in Model Sites: Referral Data
## - William J. Johnston Middle School
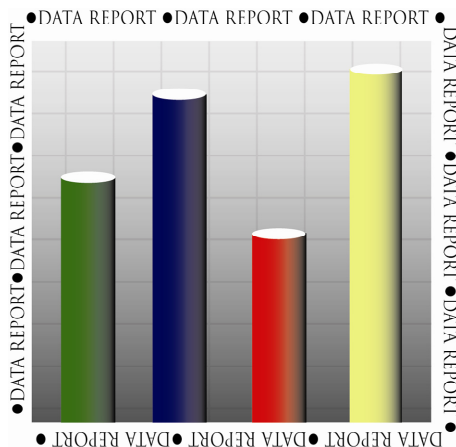


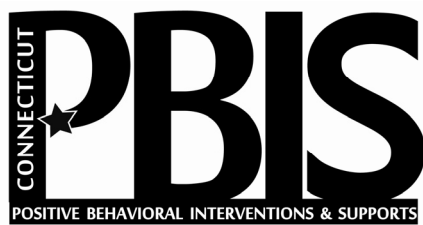Source: www.swis.org

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