

What is happening in your school? Problem solving using student behaviour data

Tim Lewis, Ph.D.

University of Missouri

*OSEP Center on Positive
Behavioral Intervention & Supports*
pbis.org

Missouri SW-PBS
pbissmissouri.org

Making Data-Based Decisions

Purpose

- Needs Assessment (Where do we start/ how do we maintain)
 - Self Assessment Survey
- Help guide on-going instructional decisions (SWIS)
 - Are we impacting student academic & social behavior
- System Evaluation / Implementation fidelity (TFI)
 - What supports do the staff need

Self-Assessment Survey (SAS)

Purpose:

- Identifies the perceptions of the status and the priority for improvement of SW-PBS systems:
 - School-wide discipline
 - Non-classroom management
 - Classroom management
 - Individual students engaging in chronic problem behaviors
- Used for building awareness with staff, action planning and decision-making, assessment of change over time, and team validation.

Schoolwide SYSTEMS



Current Status			Feature	Priority for Improvement		
In Place	Partial in Place	Not in Place	Schoolwide is defined as involving all students, all staff, & all settings.	High	Med	Low
			1. A small number (e.g. 3-5) of positively & clearly stated student expectations or rules are defined.			
			2. Expected student behaviors are taught directly.			
			3. Expected student behaviors are rewarded regularly.			
			4. Problem behaviors (failure to meet expected student behaviors) are defined clearly.			
			5. Consequences for problem behaviors are defined clearly.			
			6. Distinctions between office v. classroom managed problem behaviors are clear.			
			7. Options exist to allow classroom instruction to continue when problem behavior occurs.			
			8. Procedures are in place to address emergency/dangerous situations.			
			9. A team exists for behavior support planning & problem solving.			

SAS Scoring Definitions & Artifacts

School-wide is defined as involving all students, all staff, & all settings.

Feature	Possible Data Sources	Scoring Criteria
1. A small number (e.g. 3-5) of positively & clearly stated student expectations or rules are defined.	<ul style="list-style-type: none"> Matrix Student handbook Staff handbook 	<p>Not in Place – Behavioral expectations have not been identified, are not all positively stated, or are more than 5 in number.</p> <p>Partially in Place – Behavioral expectations identified but may not be positively stated or included in the matrix.</p> <p>In Place – Five or fewer behavioral expectations exist that are positive and identified for specific settings.</p>
2. Expected student behaviors are taught directly.	<ul style="list-style-type: none"> Lesson plans Teaching schedule 	<p>Not in Place – Expected behaviors are not taught.</p> <p>Partially in Place – Expected behaviors are taught informally or inconsistently.</p> <p>In Place – Formal system with written schedules is used to teach expected behaviors directly to students across classroom and campus settings.</p>
3. Expected student behaviors are rewarded regularly.	<ul style="list-style-type: none"> School-wide recognition system 	<p>Not in Place – There is no school-wide system for regularly rewarding or reinforcing student behavior.</p> <p>Partially in Place – There is a school-wide system for regularly rewarding or reinforcing student behavior but it is not consistently utilized.</p> <p>In Place – A school-wide system for regularly rewarding or reinforcing students is in place and consistently utilized.</p>

Self-Assessment Survey Total Score

Demonstration School Exemplar

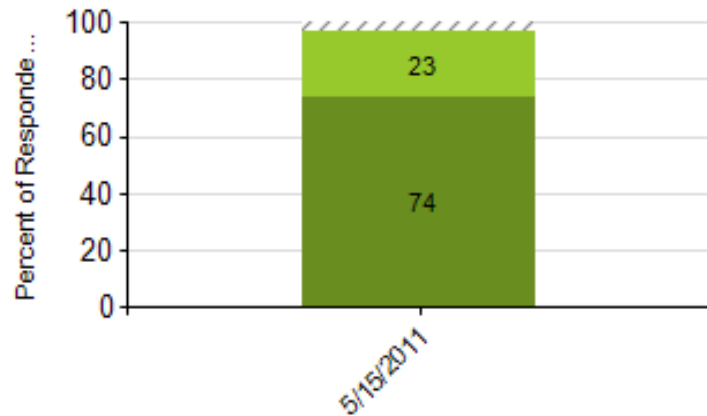
NCES ID:

Zenith, Winnemac

Demonstration District

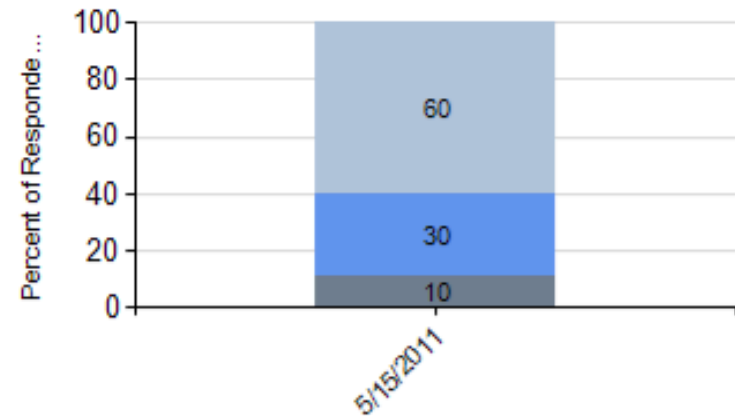
NCES ID:

School-Wide Current Status
Demonstration School Exemplar
5/15/2011



	5/15/2011
In Place	74%
Partial	23%
Not	3%

School-Wide Improvement Priority
Demonstration School Exemplar
5/15/2011



	5/15/2011
High	10%
Medium	30%
Low	60%

SAS School-wide System Subscale

Demonstration School Exemplar

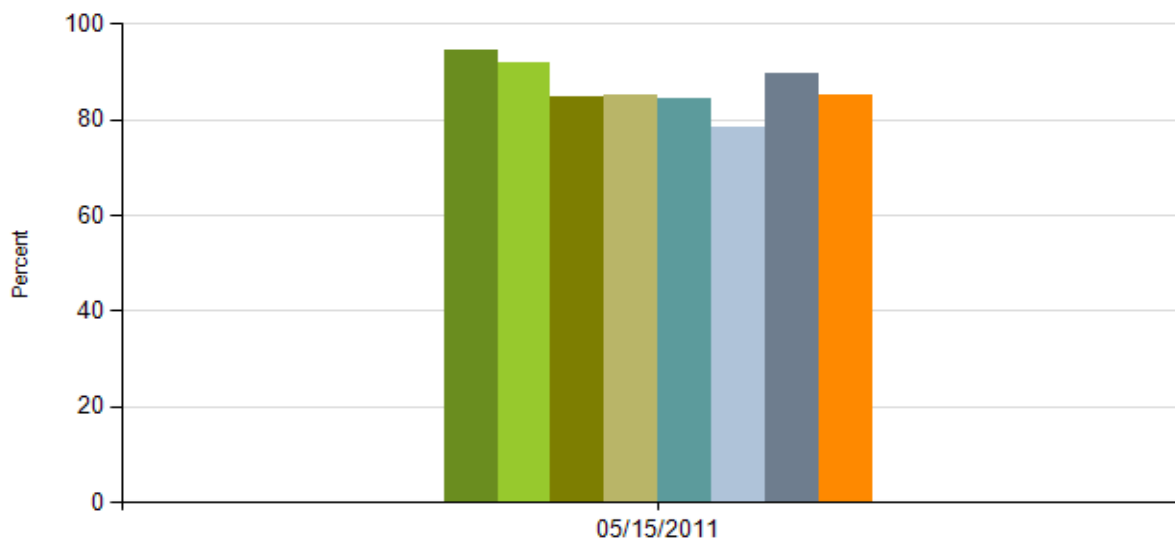
NCES ID:

Zenith, Winnemac

Demonstration District

NCES ID:

SAS School-wide System Subscale
Demonstration School Exemplar
5/15/2011



■ Expectations Defined
 ■ Reward System
 ■ Monitoring
 ■ District Support
■ Expectations Taught
 ■ Violations System
 ■ Management
 ■ Implementation Average

	Expectations Defined	Expectations Taught	Reward System	Violations System	Monitoring	Management	District Support	Implementation Average
5/15/2011	95%	92%	85%	85%	85%	78%	89%	85%

Self-Assessment Survey Items

Elementary School NCES

School Year			Number of Responses	Date Completed		
2017-18			26	10/17/2017		
Current Status			Feature	Improvement Priority		
In Place	Partial	Not	System: School-Wide	High	Medium	Low
77 %	23 %	0 %	1. A small number (e.g. 3-5) of positively and clearly stated student expectations or rules are defined.	20 %	12 %	68 %
77 %	23 %	0 %	2. Expected student behaviors are taught directly.	25 %	25 %	50 %
52 %	39 %	9 %	3. Expected student behaviors are rewarded regularly.	4 %	35 %	61 %
46 %	54 %	0 %	4. Problem behaviors (failure to meet expected student behaviors) are defined clearly.	26 %	43 %	30 %
16 %	80 %	4 %	5. Consequences for problem behaviors are defined clearly.	32 %	48 %	20 %
23 %	69 %	8 %	6. Distinctions between office v. classroom managed problem behaviors are clear.	28 %	40 %	32 %
65 %	35 %	0 %	7. Options exist to allow classroom instruction to continue when problem behavior occurs.	20 %	36 %	44 %
92 %	8 %	0 %	8. Procedures are in place to address emergency/dangerous situations.	4 %	24 %	72 %
81 %	19 %	0 %	9. A team exists for behavior support planning & problem solving.	0 %	46 %	54 %
100 %	0 %	0 %	10. School administrator is an active participant on the behavior support team.	8 %	8 %	83 %
22 %	48 %	30 %	11. Data on problem behavior patterns are collected and summarized within an on-going system.	23 %	50 %	27 %
20 %	60 %	20 %	12. Patterns of student problem behavior are reported to teams and faculty for active decision-making on a regular basis (e.g. monthly).	25 %	60 %	15 %
50 %	45 %	5 %	13. School has formal strategies for informing families about expected student behaviors at school.	13 %	43 %	43 %
14 %	43 %	43 %	14. Booster training activities for students are developed, modified, & conducted based on school data.	7 %	27 %	67 %
9 %	64 %	27 %	15. School-wide behavior support team has a budget for (a) teaching students, (b) on-going rewards, and (c) annual staff planning.	8 %	31 %	62 %
52 %	39 %	9 %	16. All staff are involved directly and/or indirectly in school-wide interventions.	4 %	48 %	48 %
48 %	52 %	0 %	17. The school team has access to on-going training and support from district personnel.	14 %	48 %	38 %
77 %	23 %	0 %	18. The school is required by the district to report on the social climate, discipline level or student behavior at least annually.	15 %	15 %	69 %

Self-Assessment Survey Items

Demonstration School Exemplar

NCES ID:

Zenith, Winnemac

Demonstration District

NCES ID:

School Year			Number of Responses	Date Completed		
2010-11			37	05/15/2011		
Current Status			Feature	Improvement Priority		
In Place	Partial	Not	System: schoolwide	High	Medium	Low
89 %	11 %	0 %	1. A small number (e.g. 3-5) of positively and clearly stated student expectations or rules are defined.	0 %	25 %	75 %
84 %	16 %	0 %	2. Expected student behaviors are taught directly.	3 %	34 %	63 %
69 %	31 %	0 %	3. Expected student behaviors are rewarded regularly.	9 %	50 %	41 %
70 %	30 %	0 %	4. Problem behaviors (failure to meet expected student behaviors) are defined clearly.	13 %	35 %	52 %
65 %	35 %	0 %	5. Consequences for problem behaviors are defined clearly.	16 %	29 %	55 %
65 %	32 %	3 %	6. Distinctions between office v. classroom managed problem behaviors are clear.	10 %	47 %	43 %
67 %	33 %	0 %	7. Options exist to allow classroom instruction to continue when problem behavior occurs.	3 %	42 %	55 %
89 %	8 %	3 %	8. Procedures are in place to address emergency/dangerous situations.	15 %	15 %	70 %
86 %	14 %	0 %	9. A team exists for behavior support planning & problem solving.	13 %	22 %	66 %
92 %	8 %	0 %	10. School administrator is an active participant on the behavior support team.	9 %	19 %	72 %
78 %	16 %	5 %	11. Data on problem behavior patterns are collected and summarized within an on-going system.	6 %	25 %	69 %
56 %	31 %	14 %	12. Patterns of student problem behavior are reported to teams and faculty for active decision-making on a regular basis (e.g. monthly).	19 %	32 %	48 %
89 %	8 %	3 %	13. School has formal strategies for informing families about expected student behaviors at school.	9 %	19 %	72 %
54 %	41 %	5 %	14. Booster training activities for students are developed, modified, & conducted based on school data.	19 %	41 %	41 %
36 %	50 %	14 %	15. School-wide behavior support team has a budget for (a) teaching students, (b) on-going rewards, and (c) annual staff planning.	21 %	42 %	36 %
76 %	16 %	8 %	16. All staff are involved directly and/or indirectly in school-wide interventions.	16 %	22 %	63 %
77 %	20 %	3 %	17. The school team has access to on-going training and support from district personnel.	3 %	22 %	75 %
83 %	17 %	0 %	18. The school is required by the district to report on the social climate, discipline level or student behavior at least annually.	3 %	16 %	81 %

Data-Based Decision Making

1. Determine what questions you want to answer
2. Determine what data will help to answer questions
3. Determine the simplest way to get data
4. Put system in place to collect data
5. Analyze data to answer questions

Focus on both Academic and Social Outcomes

1. Determine what questions you want to answer

Examples

- Can we predict problems/success?
 - When/where/who?
- Possible “function” of problem behavior?
- Who needs targeted or intensive academic supports?
- What environmental changes/supports are needed?

Data-based Decision Making Worksheet

1. Question	2. Data to help answer	3. Simplest way to get data	4. System to collect	5. Analysis
Does our PBS intervention focusing on universal social supports decrease problem behavior?	<p>Existing: Office Discipline Referral Form</p> <p>Current collection: Team notes</p> <p>Additional: more specifics on form and clearly defined categories</p>	<p>ODR form sent to office for both Majors and Minors</p> <p>ODR information entered at end of each day by secretary</p>	<p>Staff send ODR with student if major offense</p> <p>Place ODR in inbox on secretaries desk for minors</p> <p>All entered by secretary daily at end of day or first thing in the AM for late submitted minors</p>	<p>Data graphed with major summaries for each PBS team meeting</p> <p>Data graphed and presented at monthly staff meetings</p> <p>Data reviewed for a) trends over time, b) month by month comparisons, c) comparisons made to last year, and d) sorted if improvements are not observed (e.g., who, where, day)</p>
Notes:	<p>Revise current office discipline form</p> <p>Draft definitions of each category</p>	<p>Introduce new form and process for majors/minors to staff</p> <p>Revise form and category definitions based on feedback</p> <p>Review new process with all staff on final form</p> <p>Set up data-base for data entry (SWIS)</p>	<p>Train secretary to enter data</p> <p>If questions arise, principal or PBS team chair consulted</p> <p>Unresolved definition /procedures returned to team for review</p>	

2. Determine what data will help to answer questions

- Existing data set(s)
- Current data collection
- Additional / new data

- *Confidence in accuracy?*
- *Complete picture?*

Data-based Decision Making Worksheet

1. Question	2. Data to help answer	3. Simplest way to get data	4. System to collect	5. Analysis
Does our PBS intervention focusing on universal social supports decrease problem behavior?	Existing: Office Discipline Referral Form Current collection: Team notes Additional: more specifics on form and clearly defined categories	ODR form sent to office for both Majors and Minors ODR information entered at end of each day by secretary	Staff send ODR with student if major offense Place ODR in inbox on secretaries desk for minors All entered by secretary daily at end of day or first thing in the AM for late submitted minors	Data graphed with major summaries for each PBS team meeting Data graphed and presented at monthly staff meetings Data reviewed for a) trends over time, b) month by month comparisons, c) comparisons made to last year, and d) sorted if improvements are not observed (e.g., who, where, day)
Notes:	Revise current office discipline form Draft definitions of each category	Introduce new form and process for majors/minors to staff Revise form and category definitions based on feedback Review new process with all staff on final form Set up data-base for data entry (SWIS)	Train secretary to enter data If questions arise, principal or PBS team chair consulted Unresolved definition /procedures returned to team for review	

3. Determine the simplest way to get data

- Agreement on definitions
- Standard forms / process
- Frequency of collection
- Target “Multi-purpose” data/use

Train ALL staff on use & provide on-going TA

Data-based Decision Making Worksheet

1. Question	2. Data to help answer	3. Simplest way to get data	4. System to collect	5. Analysis
Does our PBS intervention focusing on universal social supports decrease problem behavior?	Existing: Office Discipline Referral Form Current collection: Team notes Additional: more specifics on form and clearly defined categories	ODR form sent to office for both Majors and Minors ODR information entered at end of each day by secretary	Staff send ODR with student if major offense Place ODR in inbox on secretaries desk for minors All entered by secretary daily at end of day or first thing in the AM for late submitted minors	Data graphed with major summaries for each PBS team meeting Data graphed and presented at monthly staff meetings Data reviewed for a) trends over time, b) month by month comparisons, c) comparisons made to last year, and d) sorted if improvements are not observed (e.g., who, where, day)
Notes:	Revise current office discipline form Draft definitions of each category	Introduce new form and process for majors/minors to staff Revise form and category definitions based on feedback Review new process with all staff on final form Set up data-base for data entry (SWIS)	Train secretary to enter data If questions arise, principal or PBS team chair consulted Unresolved definition /procedures returned to team for review	

4. Put system in place to collect data

- Build on existing systems
- Add components over time
- Central entry point
 - Electronic

Data-based Decision Making Worksheet

1. Question	2. Data to help answer	3. Simplest way to get data	4. System to collect	5. Analysis
Does our PBS intervention focusing on universal social supports decrease problem behavior?	Existing: Office Discipline Referral Form Current collection: Team notes Additional: more specifics on form and clearly defined categories	ODR form sent to office for both Majors and Minors ODR information entered at end of each day by secretary	Staff send ODR with student if major offense Place ODR in inbox on secretaries desk for minors All entered by secretary daily at end of day or first thing in the AM for late submitted minors	Data graphed with major summaries for each PBS team meeting Data graphed and presented at monthly staff meetings Data reviewed for a) trends over time, b) month by month comparisons, c) comparisons made to last year, and d) sorted if improvements are not observed (e.g., who, where, day)
Notes:	Revise current office discipline form Draft definitions of each category	Introduce new form and process for majors/minors to staff Revise form and category definitions based on feedback Review new process with all staff on final form Set up data-base for data entry (SWIS)	Train secretary to enter data If questions arise, principal or PBS team chair consulted Unresolved definition /procedures returned to team for review	

5. Analyze data to answer questions

- Trends
- Instruction & supports in place/not in-place
- Pre/post “big outcomes”
- Comparisons (norm / local)
 - Relative growth
 - Absolute growth

Data-based Decision Making Worksheet

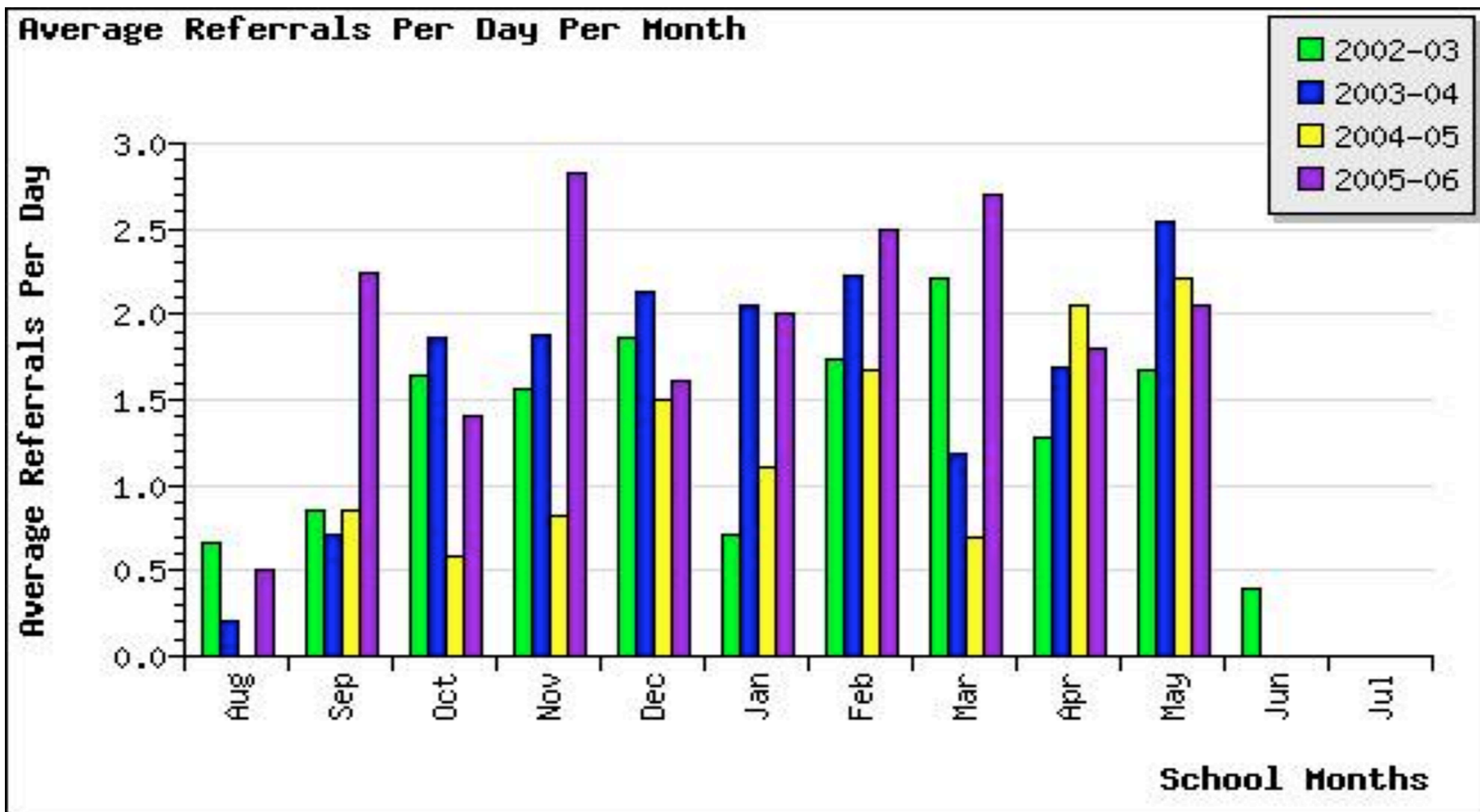
1. Question	2. Data to help answer	3. Simplest way to get data	4. System to collect	5. Analysis
Does our PBS intervention focusing on universal social supports decrease problem behavior?	Existing: Office Discipline Referral Form Current collection: Team notes Additional: more specifics on form and clearly defined categories	ODR form sent to office for both Majors and Minors ODR information entered at end of each day by secretary	Staff send ODR with student if major offense Place ODR in inbox on secretaries desk for minors All entered by secretary daily at end of day or first thing in the AM for late submitted minors	Data graphed with major summaries for each PBS team meeting Data graphed and presented at monthly staff meetings Data reviewed for a) trends over time, b) month by month comparisons, c) comparisons made to last year, and d) sorted if improvements are not observed (e.g., who, where, day)
Notes:	Revise current office discipline form Draft definitions of each category	Introduce new form and process for majors/minors to staff Revise form and category definitions based on feedback Review new process with all staff on final form Set up data-base for data entry (SWIS)	Train secretary to enter data If questions arise, principal or PBS team chair consulted Unresolved definition /procedures returned to team for review	

Making Data-Based Decisions (June 5)

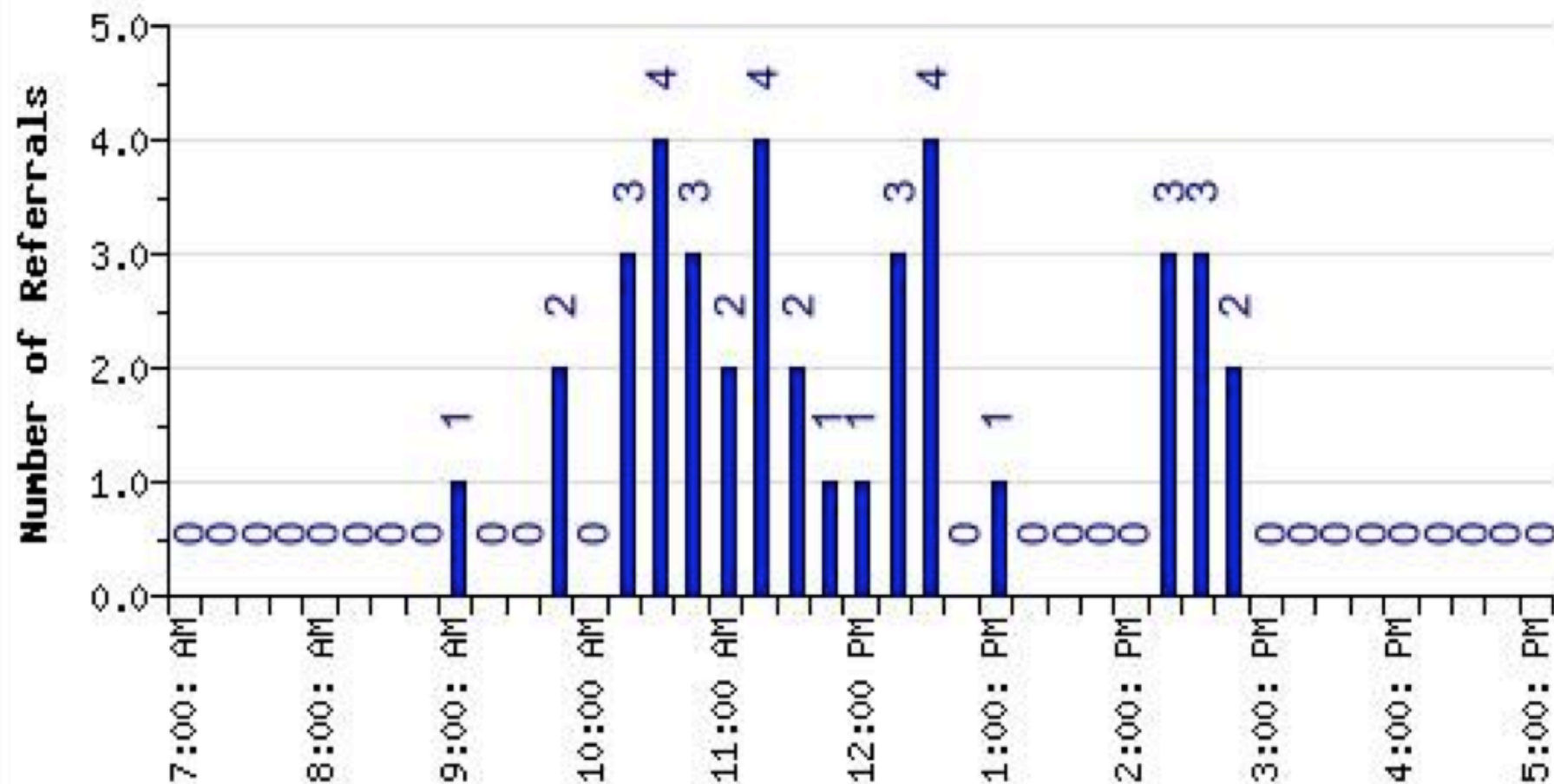
Purpose

- Needs Assessment (Where do we start/ how do we maintain)
 - Self Assessment Survey
 - Local school versions
- Help guide on-going instructional decisions (SWIS)
 - Are we impacting student academic & social behavior
- System Evaluation / Implementation fidelity (TFI)
 - What supports do the staff need

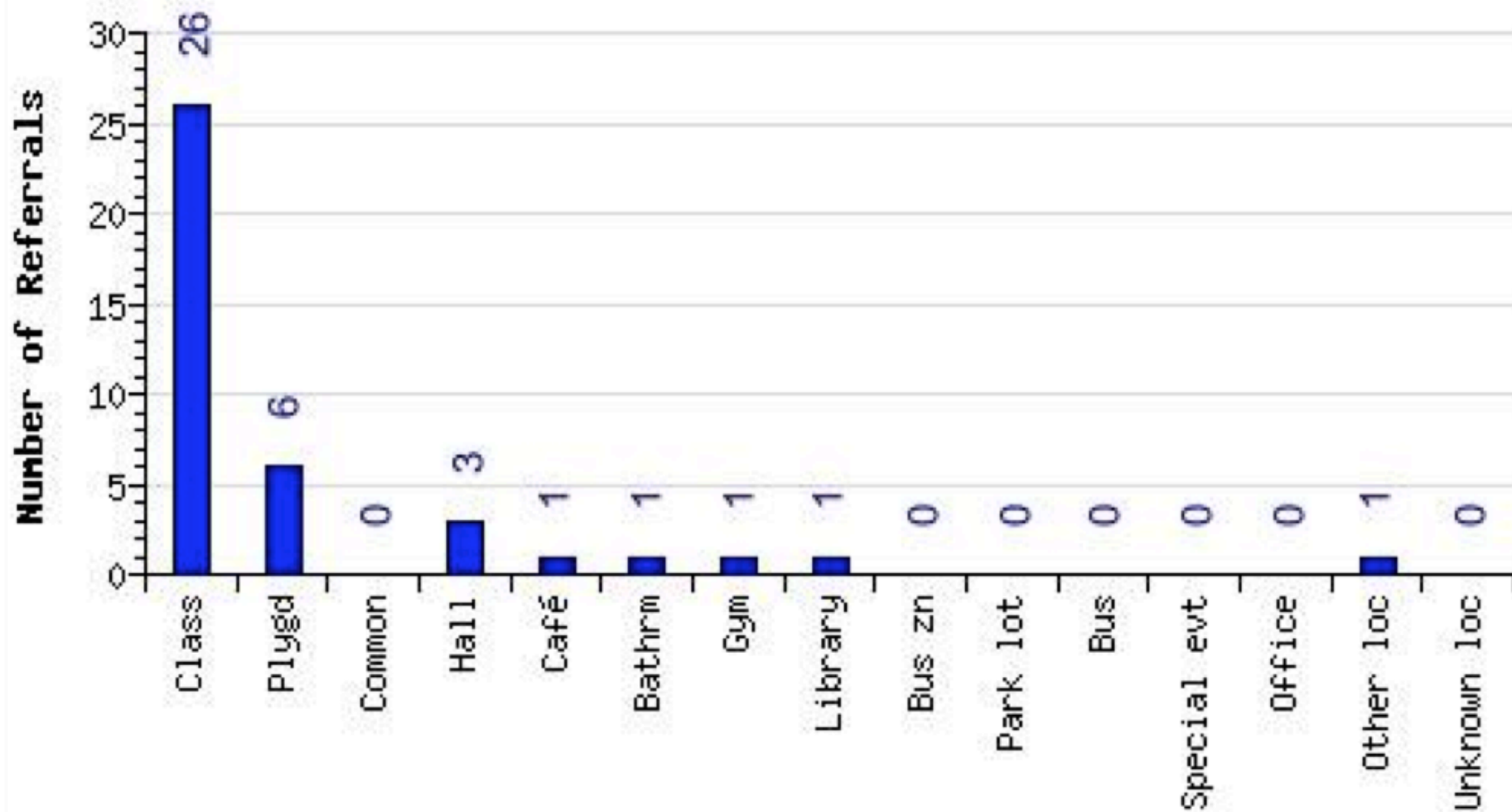
“Big Five”



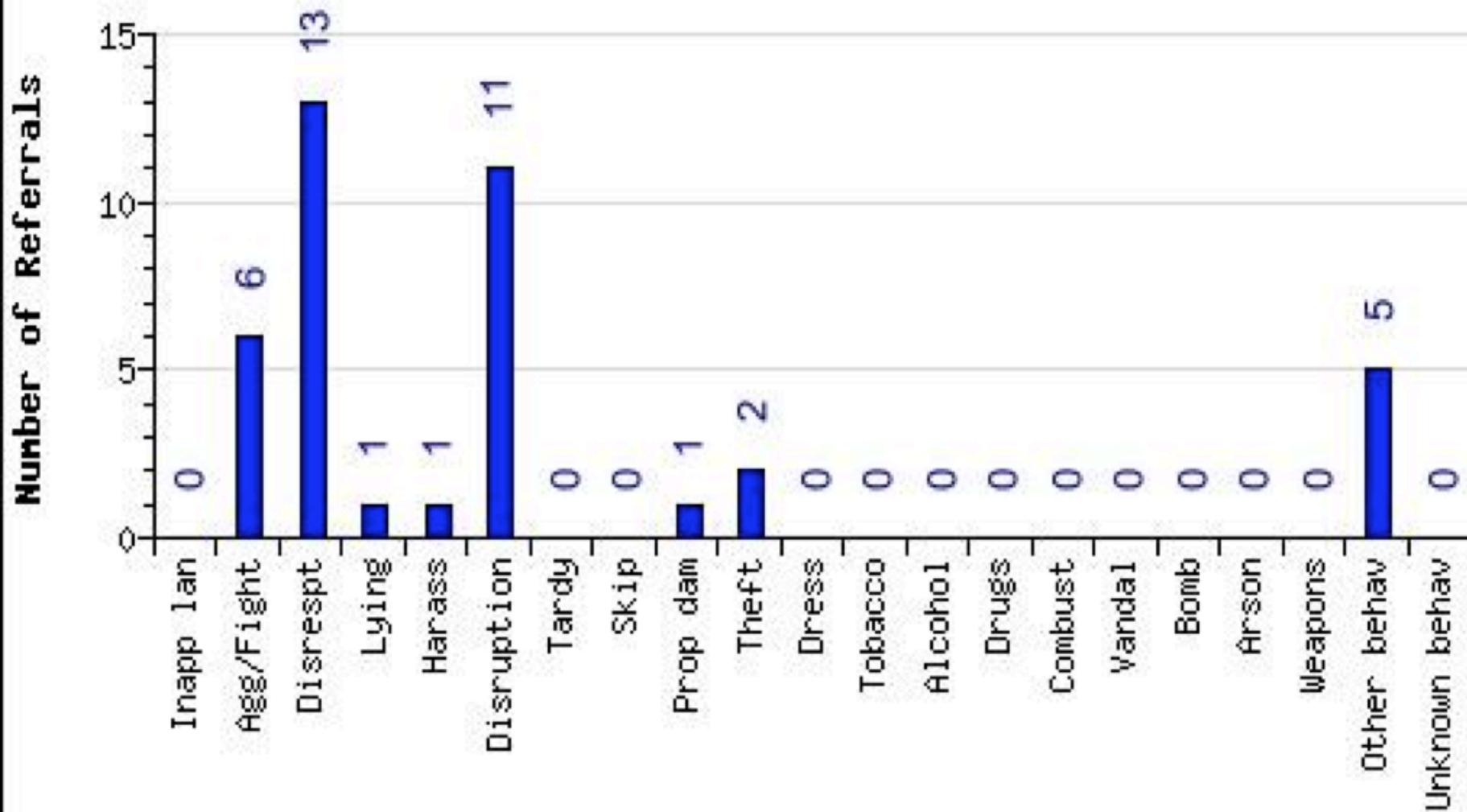
Referrals By Time



Referrals By Location



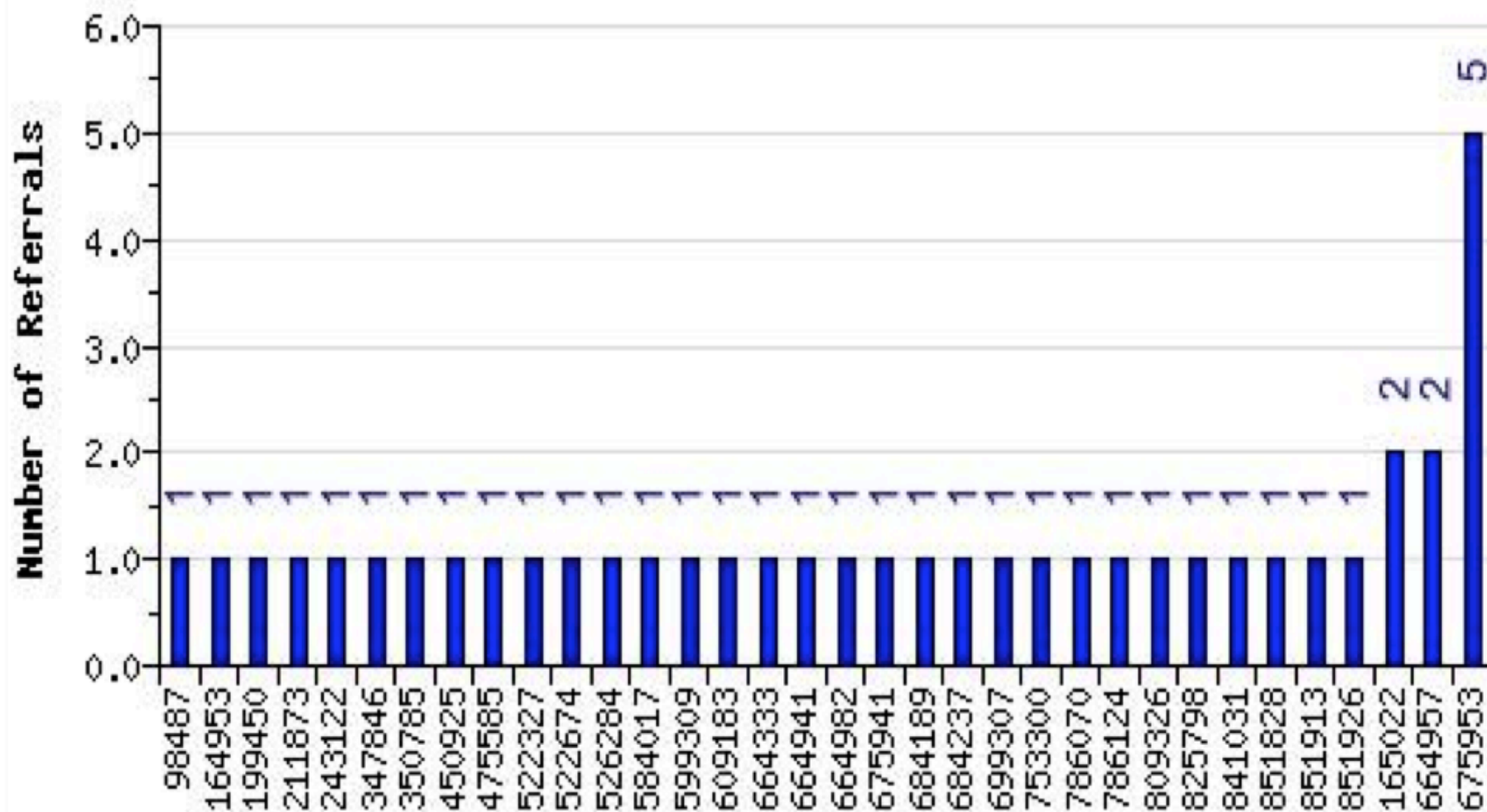
Referrals By Problem Behavior



PBIS

Positive Behavioral
Interventions & Supports
OSEP TECHNICAL ASSISTANCE CENTER

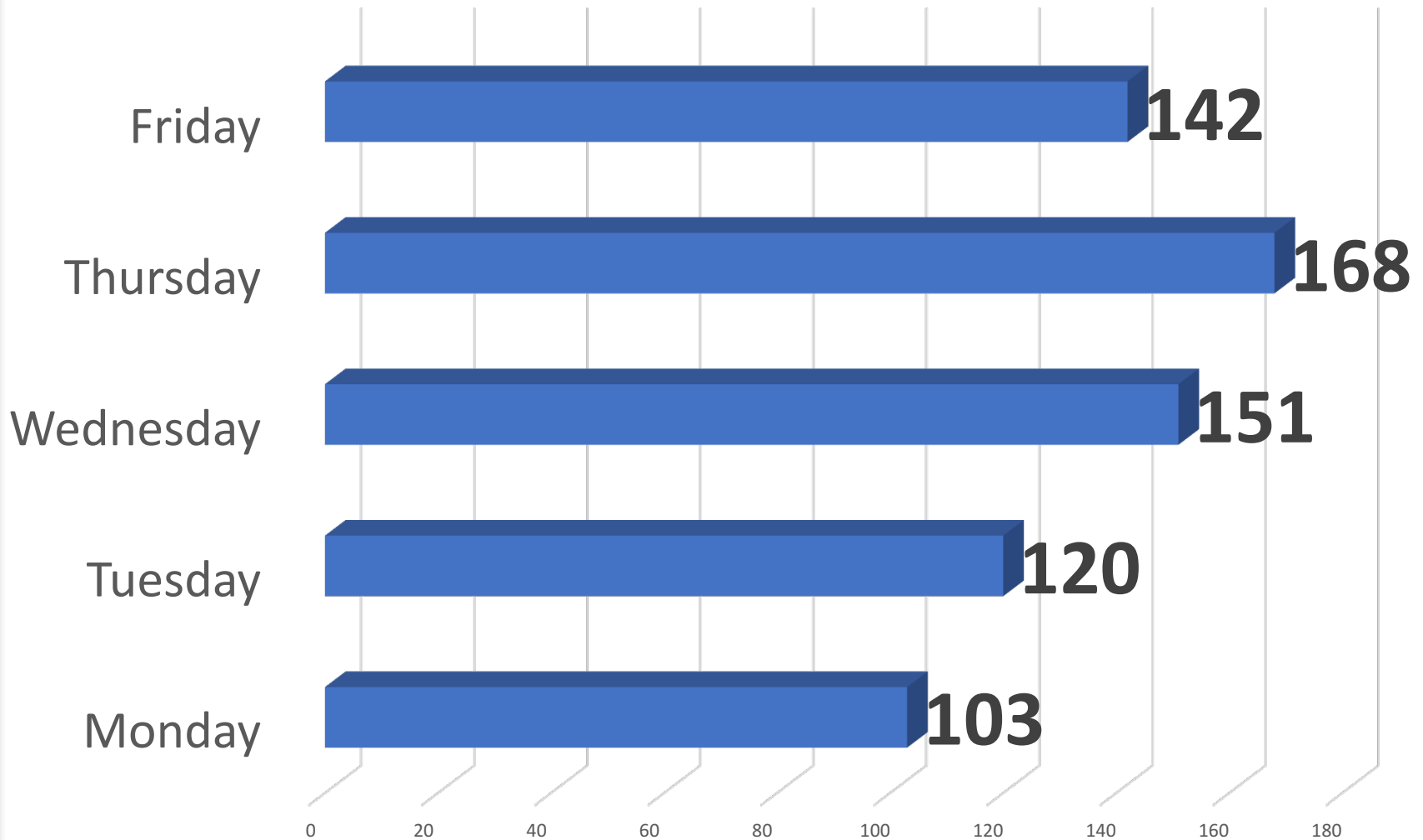
Referrals By Student



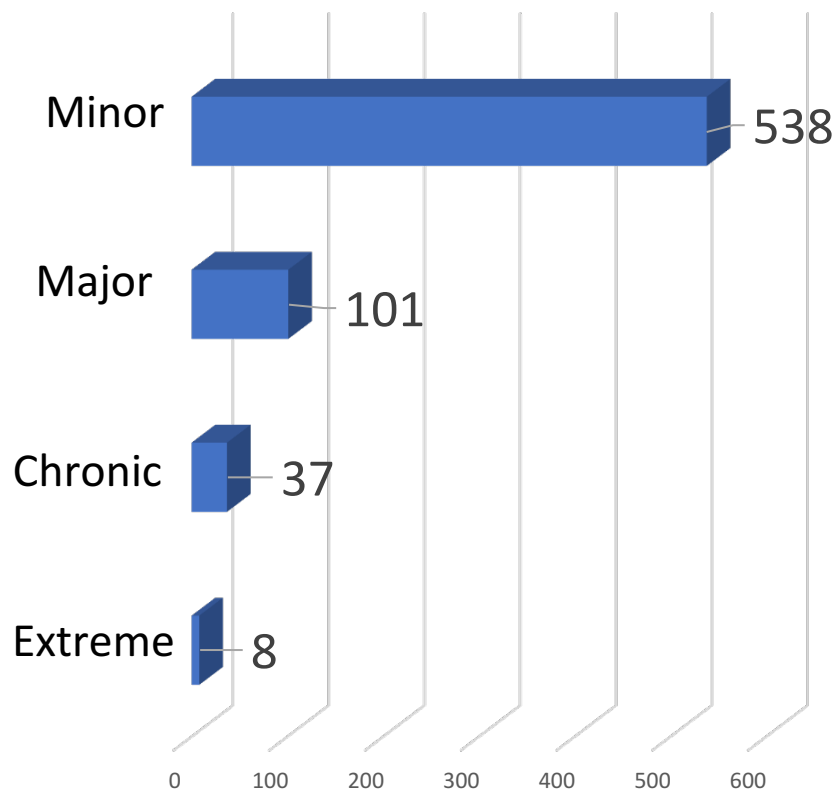
PBIS

Positive Behavioral
Interventions & Supports
OSEP TECHNICAL ASSISTANCE CENTER

February 2016 Count of Behavior Incidents By Day of the Week (District Wide)



February 2016 Count of Incidents By Severity
Level (Minor, Major, Extreme, Chronic)



79 % of Incidents
were reported as
Minor

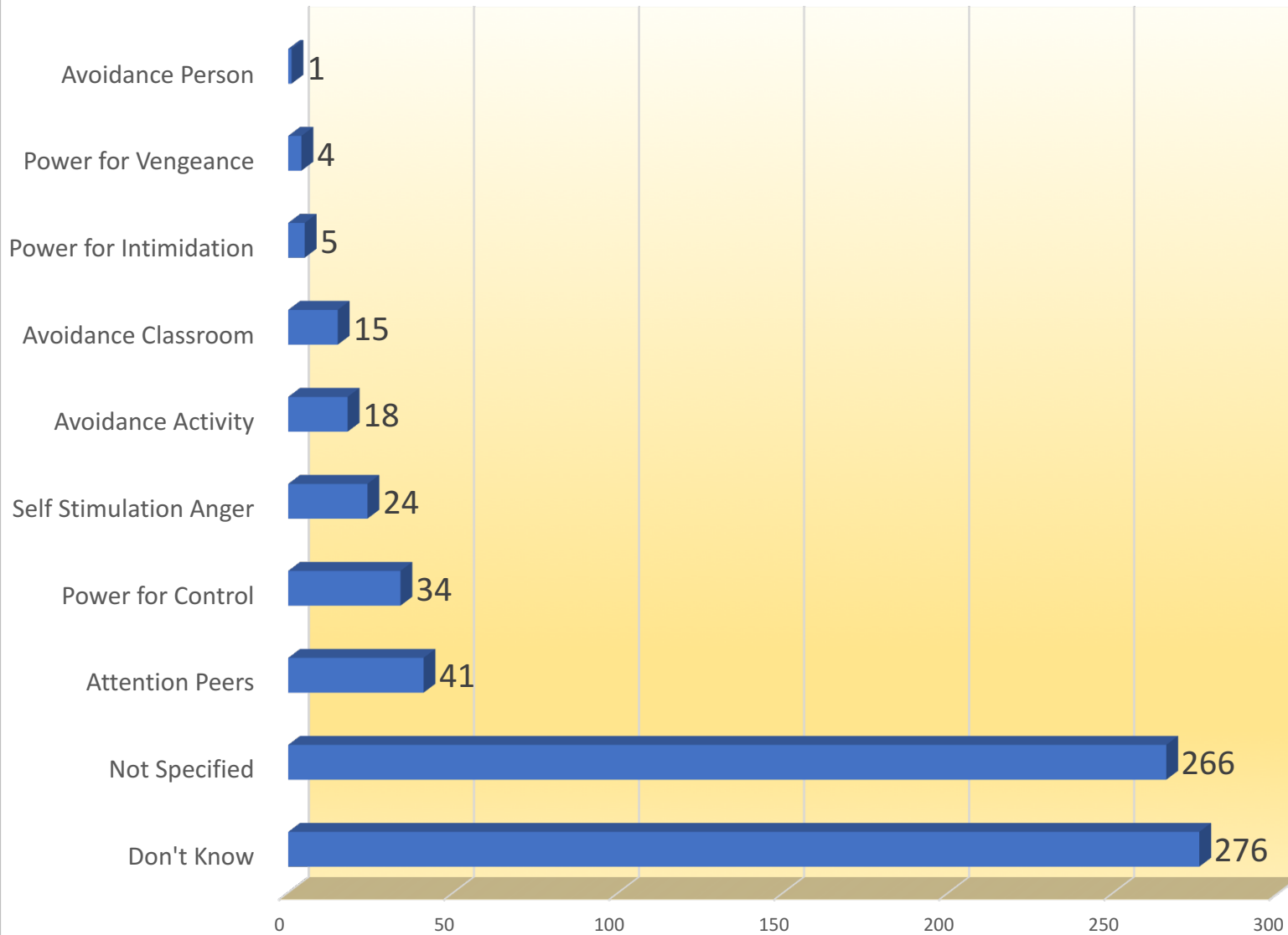
15 % as Major

5 % as Chronic

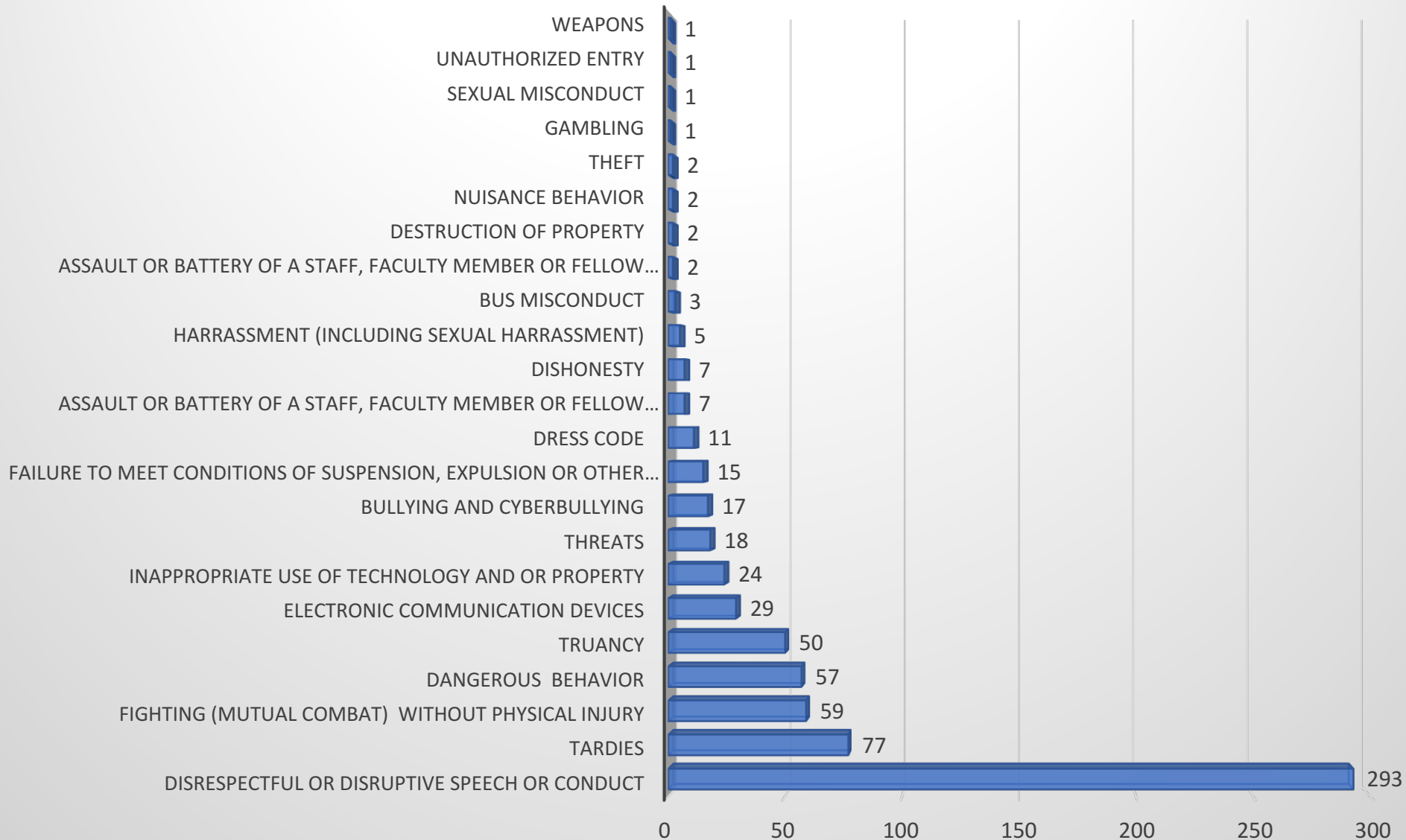
1% as Extreme

Incidents Per Day: $684 / 18 \text{ days} = 38 \text{ Incidents}$

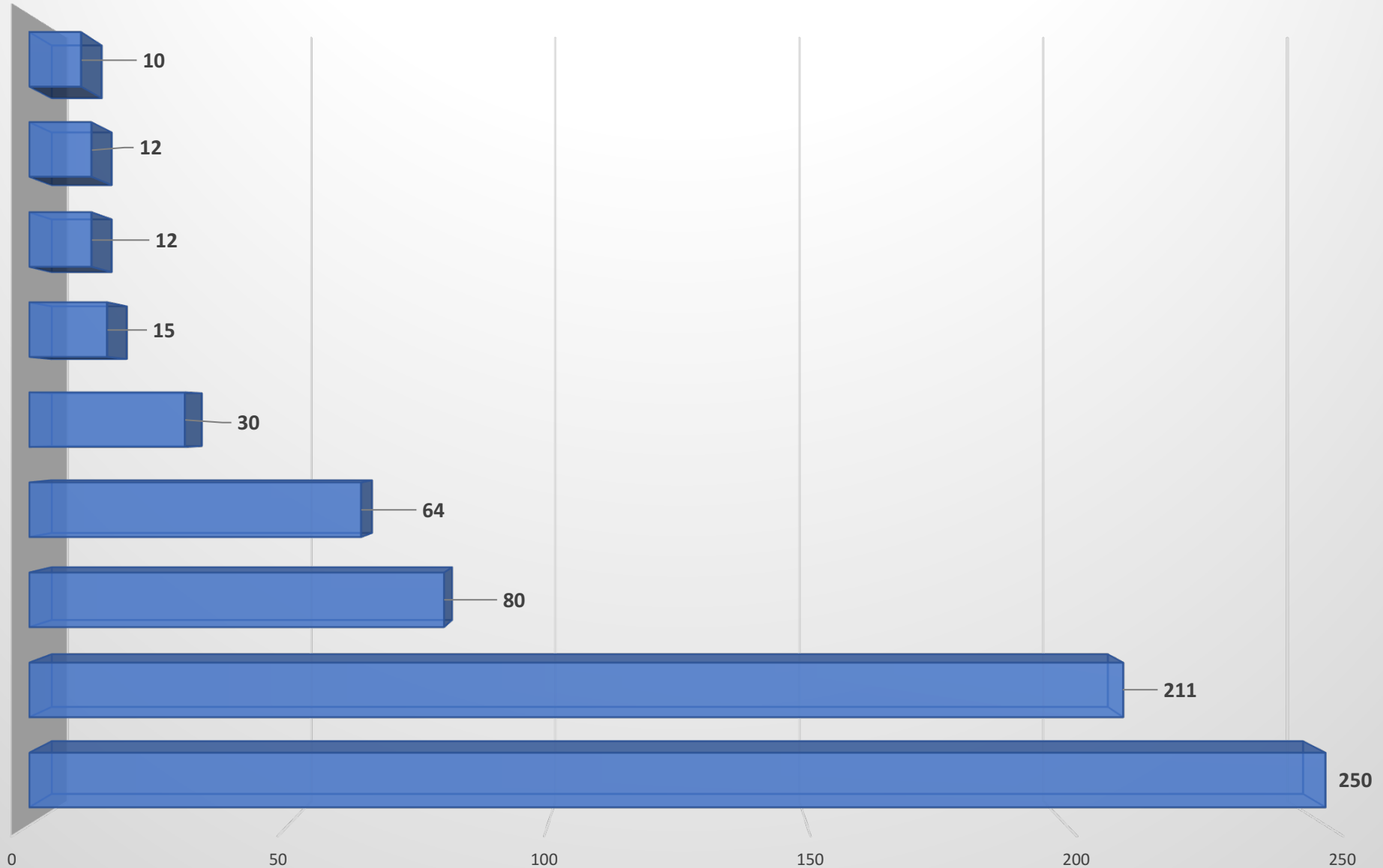
February 2016 Count of Motivation for Behavior



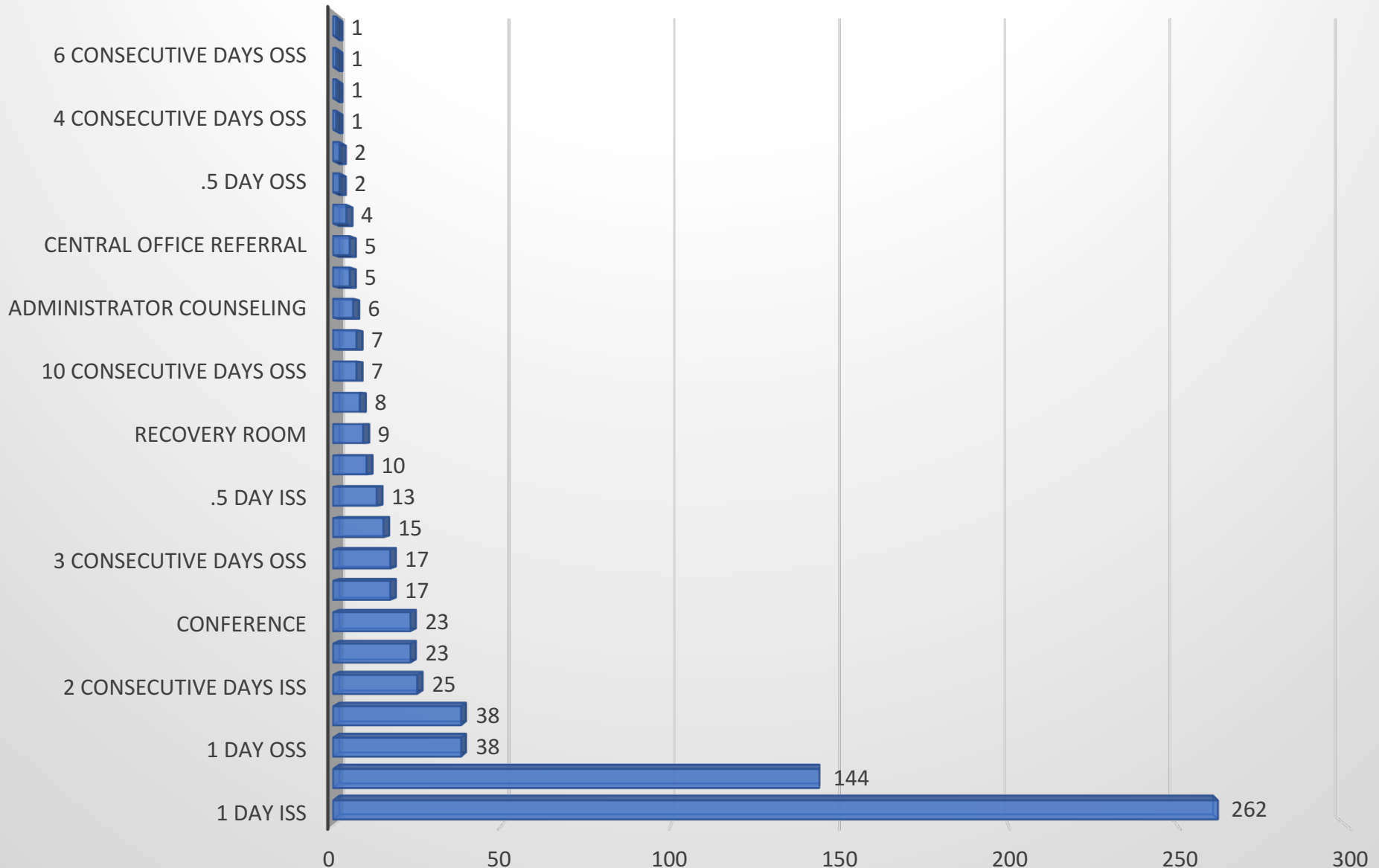
February 2016 Count of Behavior Incidents By Event Type



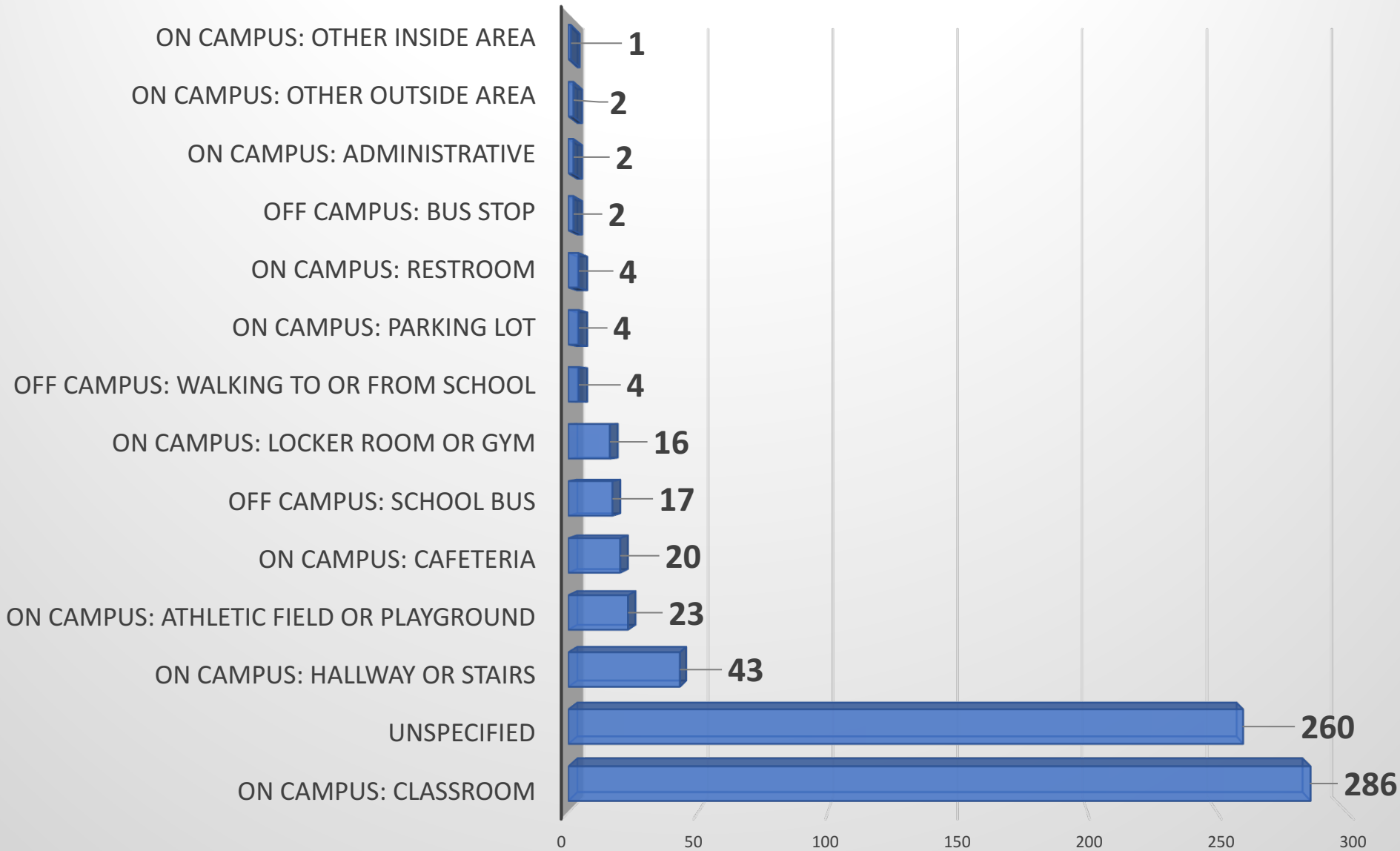
February 2016 Count of Behavior Incidents By Building



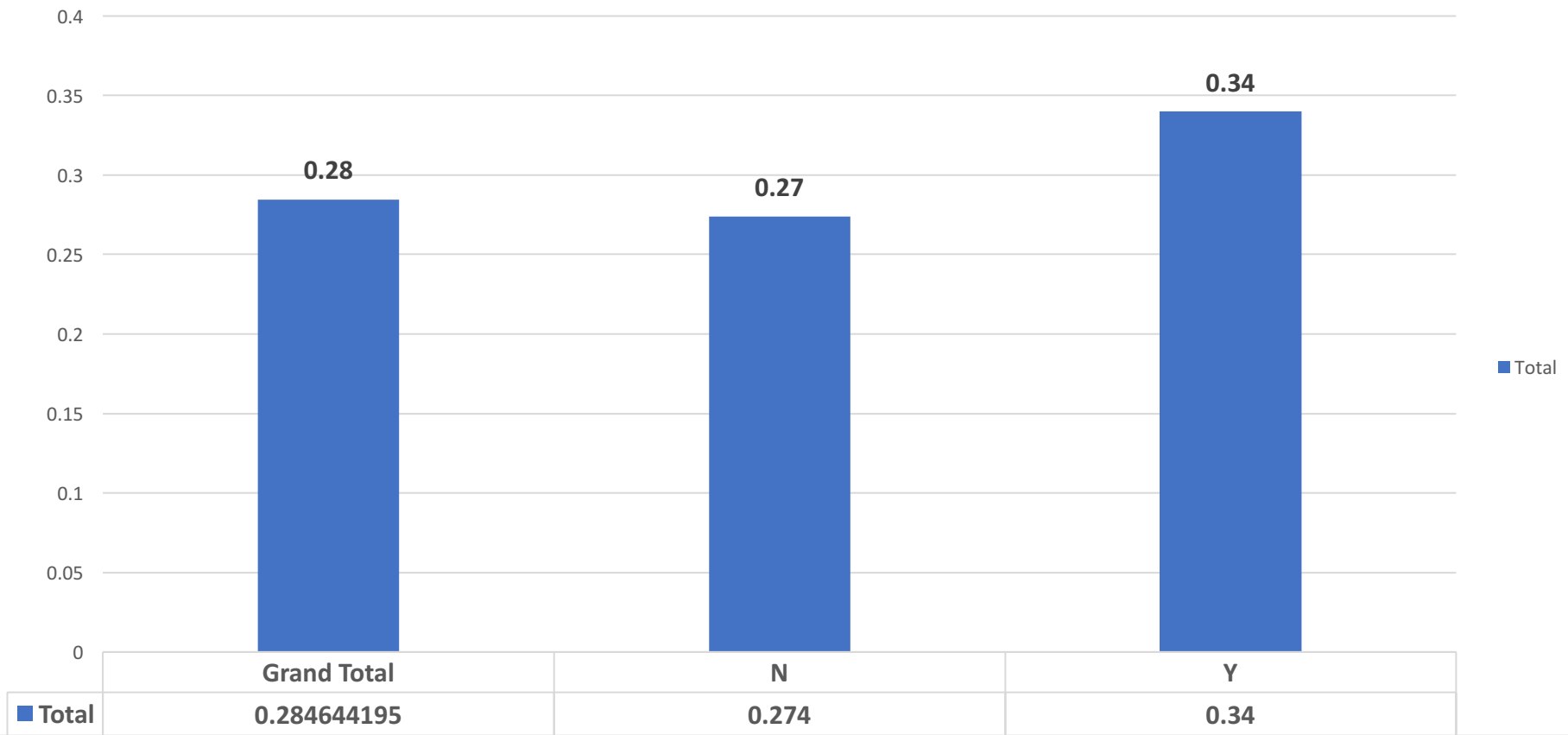
February 2016 Count of Resolutions By Type



February 2016 Count of Incidents By Location



February Incident Rate Disaggregated By Special Education Status



This graph displays the rate of incidents for all students, just NonSped, and Just SPED

Measuring Fidelity / System Planning

Tiered Fidelity Inventory



SWPBIS Tiered Fidelity Inventory

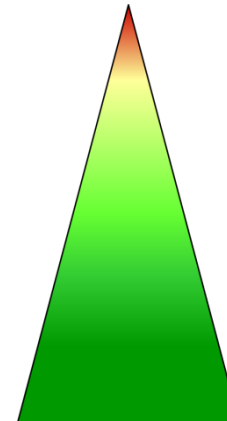
version 2.1



Citation for this Publication

Algozzine, B., Barrett, S., Eber, L., George, H., Horner, R., Lewis, T., Putnam, B., Swain-Bradway, J., McIntosh, K., & Sugai, G (2014). *School-wide PBIS Tiered Fidelity Inventory*. OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports. www.pbis.org.

The Center is supported by a grant from the US Department of Education's Office of Special Education Programs (H326S130004). Opinions expressed herein are those of the authors and do not necessarily reflect the position of the US Department of Education, and such endorsements should not be inferred.



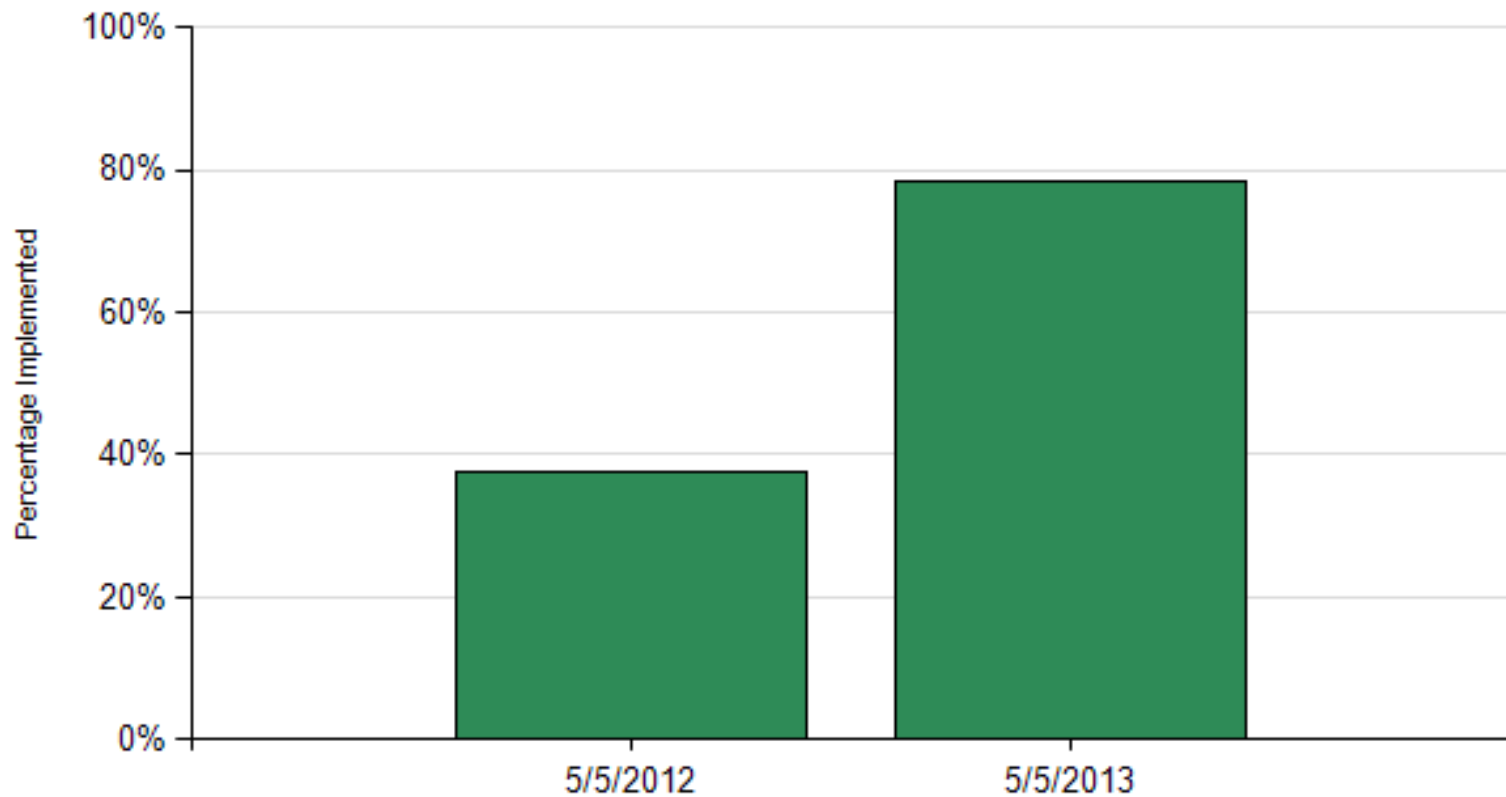
Available from OSEP TA-
Center www.pbis.org
www.pbisapps.org

No Cost

Assessors Training
PowerPoint
and
Assessors Training Video
at www.pbisapps.org

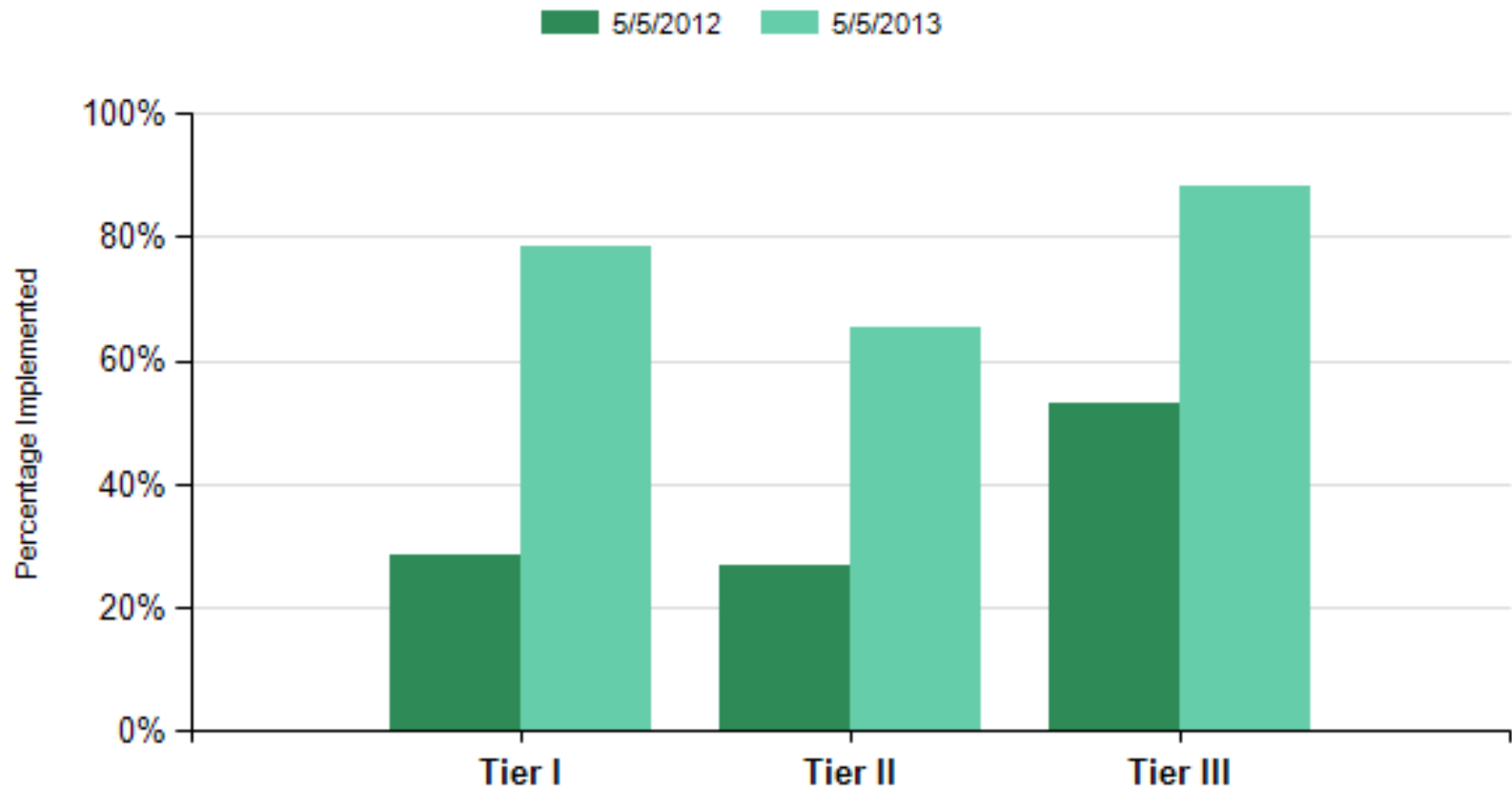
Total score (TFI)

School-Wide PBIS (SWPBIS) Tiered Fidelity Inventory
Demonstration School Challenged
5/5/2012 - 5/5/2013



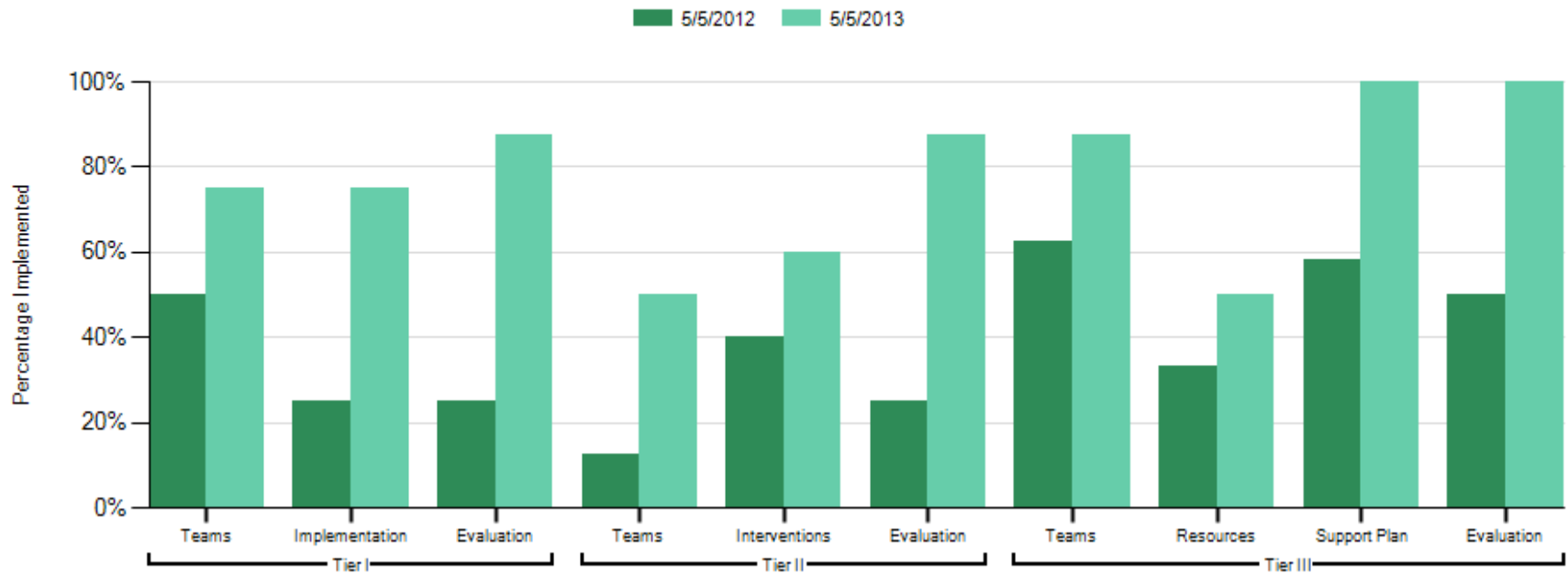
Sub-scale report

School-Wide PBIS (SWPBIS) Tiered Fidelity Inventory
Demonstration School Challenged
5/5/2012 - 5/5/2013



Sub-subscale report

School-Wide PBIS (SWPBIS) Tiered Fidelity Inventory
Demonstration School Challenged
5/5/2012 - 5/5/2013



Tier I

Teams
Implementation
Evaluation

Tier II

Teams
Interventions
Evaluation

Tier III

Teams
Resources
Assessment
Support plan
Monitoring and adaptation

Item Report

School-Wide PBIS (SWPBIS) Tiered Fidelity Inventory

Demonstration School Challenged

Zenith, Winnemac

School Year: 2011-12

Date Completed: 5/5/2012 - 5/5/2013

Tier I: Universal SWPBIS Core Features

Teams	5/5/12	5/5/13
1. Team Composition: Tier I team includes a Tier I systems coordinator, a school administrator, a family member, and individuals able to provide (1) applied behavioral expertise, (2) coaching expertise, (3) knowledge of student academic and behavior patterns, (4) knowledge about the operations of the school across grade levels and programs, and for high schools, (5) student representation.	1	2
2. Team Operating Procedures: Tier I team meets at least monthly and has (a) regular meeting format/agenda, (b) minutes, (c) defined meeting roles, and (d) a current action plan.	1	1

Feature Total: 2 of 4 3 of 4

Implementation	5/5/12	5/5/13
3. Behavioral Expectations: School has five or fewer positively stated behavioral expectations and examples by setting/location for student and staff behaviors (i.e., school teaching matrix) defined and in place.	0	2

Conducting the TFI

- Work in pairs, one should be familiar with school efforts to date (target one hour)
- See school appointment sheet (Chad Hayes)
- Review materials in the schools google doc folder
 - Matrix
 - Lesson plans
 - PD for staff
- Use paper/pencil version – allows notes, and re-visits to items
- Work through each item with the team and have them self-score first
- Conduct the “Walk Through” (hint- write the schools 3-5 expectations on the top of the form & if they use a “ticket”)
- Submit scores to Chad Hayes

Tiered Fidelity Inventory

- TFI Training slides
- TFI protocol
- Pbisapps Tutorials
 - <https://www.pbisapps.org/Resources/Pages/Video-Tutorials.aspx>

SWPBIS Tiered Fidelity Inventory Walkthrough Tool Interview and Observation Form

School _____

Date _____

District _____

State _____

Data collector _____

School-wide Expectations:

Name of School-wide Expectations:

1. _____

2. _____

Name of Acknowledgment System:

3. _____

4. _____

5. _____

Staff Questions (Interview 10% or at least 5 staff members)			
	What are the (school rules)? Record the # of rules known.	Have you taught the school rules/ behavior expectations to students this year?	Have you given out any _____ since _____? (2 mos.)
1		Y N	Y N
2		Y N	Y N
3		Y N	Y N
4		Y N	Y N
5		Y N	Y N
6		Y N	Y N
7		Y N	Y N
8		Y N	Y N
9		Y N	Y N
10		Y N	Y N
11		Y N	Y N
12		Y N	Y N
13		Y N	Y N
14		Y N	Y N
15		Y N	Y N
Total			

Student Questions (at least 10 students)		
	What are the (school rules)? Record the # of rules known.	Have you received a _____ since _____?
1		Y N
2		Y N
3		Y N
4		Y N
5		Y N
6		Y N
7		Y N
8		Y N
9		Y N
10		Y N
11		Y N
12		Y N
13		Y N
14		Y N
15		Y N
Total		

Making Data-Based Decisions

Purpose

- Needs Assessment (Where do we start/ how do we maintain)
 - Self Assessment Survey
- Help guide on-going instructional decisions (SWIS)
 - Are we impacting student academic & social behavior
- System Evaluation / Implementation fidelity (TFI)
 - What supports do the staff need