



Providing Evidence-Based Services to Young Children and their Families

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- Technical Assistance Center on Social Emotional Interventions for Young Children
- Center on the Social and Emotional Foundations for Early Learning

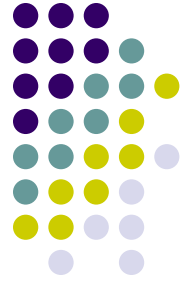
Providing Evidence-Based Practices



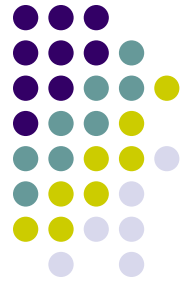
Practices that are informed by research in which the characteristics and consequences of environmental variables are empirically established and the relationship directly informs what a practitioner can do to produce a desired outcome



(Dunst, Trivette, & Cuspek, 2002)

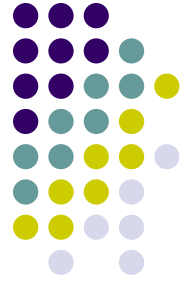


- Has the intervention been evaluated in a peer-reviewed journal?
- Has the intervention been replicated across investigators, settings, and participants?
- Are there alternative interventions that are less restrictive, better researched, or perhaps more effective or efficient?
- Is the intervention within the existing skill set of practitioners, or do they need prior training and consultation?
- Has the intervention been shown to produce outcomes like the ones intended?
- How will we evaluate the intervention if we decide to implement?

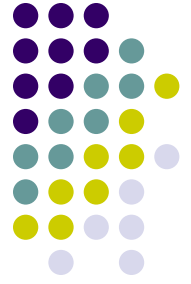


- Step 1: Formulating a well-built question
- Step 2: Identifying articles and other evidence-based resources that answer the question
- Step 3: Critically appraising the evidence to assess its validity
- Step 4: Applying the evidence
- Step 5: Re-evaluating the application of evidence and areas for improvement

The Teaching Pyramid

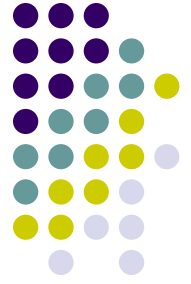


A Data-Driven Model - Some Basic Assumptions



- Outcomes are identified
- Fidelity and outcomes are measured
- Data are summarized and used to:
 - Identify training needs
 - Deliver professional development
 - Make other programmatic changes (e.g., playground schedule, program wide expectations)
 - Problem solve around specific children or issues
- Data collection is an ongoing process

Measuring Fidelity



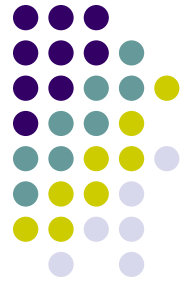
- Fidelity - the extent to which the intervention is being implemented as designed
- Provides information that is useful in making decisions about training and technical assistance needs of teachers
- Provides information that is useful in identifying other supports that teachers might need

The Teaching Pyramid Observation Tool (TPOT)



- The TPOT was developed to measure the extent to which the Teaching Pyramid practices are being implemented in a classroom
- Provides information that can be used to identify training needs of teachers

Using the TPOT



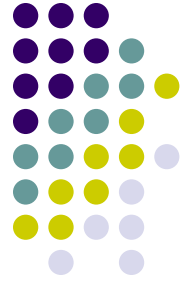
- Observations
 - Conducted for a minimum of 2 hours
 - Must observe centers or free play and at least one teacher-directed activity
 - Focus of observation is lead teacher's behavior
- Interviews
 - For those practices that cannot be observed in a 2-hour observation

Format of the TPOT



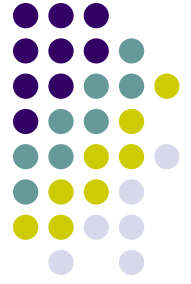
- Three types of Items
 - Environmental items (Items 1-7) - yes/no based on observation
 - Ratings of practices (items 8-22) - ratings based on observation and/or teacher report
 - Red Flags (items 23-38) - yes/no based on observation

Environmental Arrangement Items



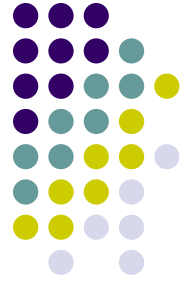
- Clear boundaries
- Move easily around room
- Lack of large open spaces
- Adequate number of centers
- Materials support play
- Preparation of centers
- Classroom rules

Items based on observations and/or teacher report



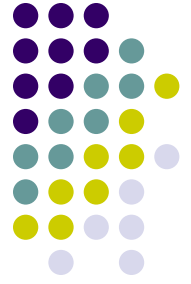
- Schedule and Routines
- Transitions between activities
- Teachers engage in supportive conversations with children
- Promoting children's engagement
- Teaching children behavior expectations
- Providing directions
- Effective strategies to respond to problem behavior
- Teaching social skills and emotional competencies
- Teaching children to express emotions
- Teaching problem solving
- Supporting friendship skills

Items are scored based on teacher report



- Supporting children with persistent problem behavior
- Communication with families to promote involvement
- Involving families to support social emotional development and addressing problem behavior
- Strategies to build collaborative teaching with other adults

Red Flag Items 23-38



- Represents issues related to teacher training, support, or program practices
- Indicates areas for immediate training
- Scored as yes/no

Items 8-22 Scoring



- Score each indicator
 - yes or no
 - not applicable or no opportunity
 - observation or interview (report)
- Assign a score of 0-5 on each item
 - **0** not all indicators under “1” receive a yes
 - **1** all indicators under “1” yes and all indicators under “3” no
 - **2** all indicators under “1” yes and some of “3” yes
 - **3** all indicators under “1” and “3” yes and none of “5”
 - **4** all indicators under “1” and “3” yes and some of “5”
 - **5** all indicators across items scored as yes

Sample Item



11. Promoting children’s engagement

0	1	2	3	4	5
<p>A classroom receives a score of “0” if all behaviors under a score of “1” are not observed</p>	<p>__Y __N (1.1) Teacher offers general guidance to children to select activities or use materials to promote engagement*</p> <p>__Y __N (1.2) Teacher provides fun activities that will support the engagement of almost all of the class *</p> <p>__Y __N (1.3) Teacher communicates with children on eye level almost all of the time *</p>		<p>__Y __N (3.1) Structured large-group (e.g., circle) activities are structured so that children are actively engaged (responding, interacting) almost all of the time</p> <p>__Y __N (3.2) Teacher assists individual children in selecting center activities and becoming actively engaged*</p> <p>__Y __N (3.3) Children are provided with multiple opportunities to make meaningful choices within activities (choosing center, choosing how to use materials, choosing where to sit, etc.)</p> <p>__Y __N (3.4) Teacher frequently comments positively on children who are engaged in activities</p>		<p>__Y __N (5.1) Teacher assists individual __N/O children who are exhibiting problem behavior within an activity become actively engaged (score N/O if no opportunity to observe) *</p> <p>__Y __N (5.2) Teacher modifies instruction or activity when children lose interest in large- and small-group activities</p>

Notes:

Sample Item and Scoring Notes



11. Promoting children’s engagement

0	1	2	3	4	5
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Notes, definitions, and examples on specific indicators:

(1.1) Examples include the teacher saying: “You could build a tall tower with those blocks” to a group of children who are wandering around the block area.

(1.2) For this indicator to be scored Y, almost all of the class must be engaged almost all of the time. Periods of wait time or activities that do not engage children would score N for this indicator.

(1.3) In order to score a Y on this indicator, teachers must use child-sized chairs or sit on the floor with children during large group time and activities. Teachers must be down on the child’s level most of the time when having conversations, engaging in play, or interacting in any way with the children.

(3.2) An example of a teacher offering materials to promote engagement is if a child is not attending during a large group activity, the teacher could offer a manipulative for that child to hold that goes along with the activity, or the teacher might give that child a specific job during the activity to keep the child engaged. Another example of a teacher guiding a non-engaged child might be during free choice time if a few children are wandering around, the teacher might start up a new fun activity in one of the centers, such as getting out pladoh or bubbles, to attract children to pick a center and get engaged in play.

(5.1) A child might be having difficulty engaging in an activity and exhibiting problem behavior if they are having trouble manipulating materials, interacting with peers, understanding the activity or the expectations for the activity. If this occurs, a teacher should take the necessary steps to either help the child get involved appropriately in the activity or help the child pick a different activity where they could become meaningfully engaged.



Sample Interview Item

16. Teaching children to express emotions

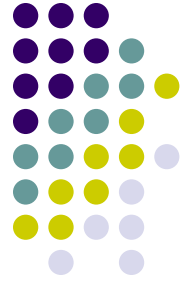
Tell me how you teach or help children learn about emotions. This includes helping children recognize and deal with their own emotions, or recognize and respond appropriately to other's emotions. Give me some examples of the emotions you teach or help children learn. What strategies do you use? What materials do you use?

Tell me how you teach or help children deal with their anger. What strategies do you use? What materials do you use?

How do you individualize instruction around emotions? Can you give me a few example?

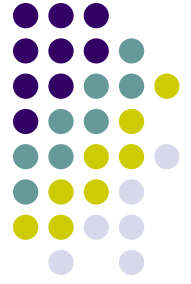
0	1	2	3	4	5
A classroom receives a score of "0" if all behaviors under a score of "1" are not observed	<p>__Y __N (1.1) Teacher models __R__O and/or labels own emotions appropriate ways to express emotions</p> <p>__Y __N (1.2)Teacher uses a __R__O variety of strategies to teach children about emotion words</p> <p>__Y __N (1.3) Teacher teaches __R__O about a variety of both positive and negative emotions</p>		<p>__Y __N (3.1) Teacher uses a variety of strategies to __R__O teach children how to recognize emotions in themselves, other children, and adults*</p> <p>__Y __N (3.2) Teacher validates children's emotions by __R__O labeling them and helping children talk about their emotions</p> <p>__Y __N (3.3) Teacher provides children with strategies __R__O to use when they are angry to calm down</p>		<p>__Y __N (5.1)Teacher uses a variety of __R__O strategies to teach children how to respond to other children's emotions</p> <p>__Y __N (5.2)Teacher individualizes __R__O instruction on emotions based on children's developmental needs. Procedures and materials vary across children</p>

TPOT Manual



- Created to provide further clarification and increase reliability of observers
- Provides clarification for many indicators within the items (items that are clarified in the manual are noted with an asterisk)
- Provides both examples and non-examples when necessary

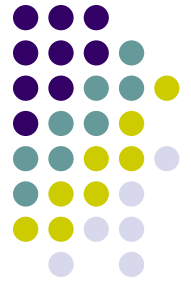
TPOT practice





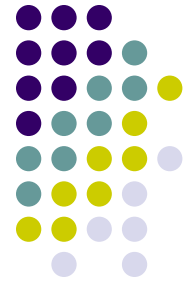
clip 1.6







clip 2.7



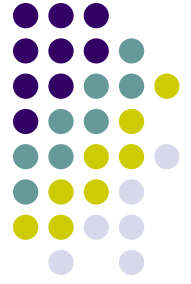


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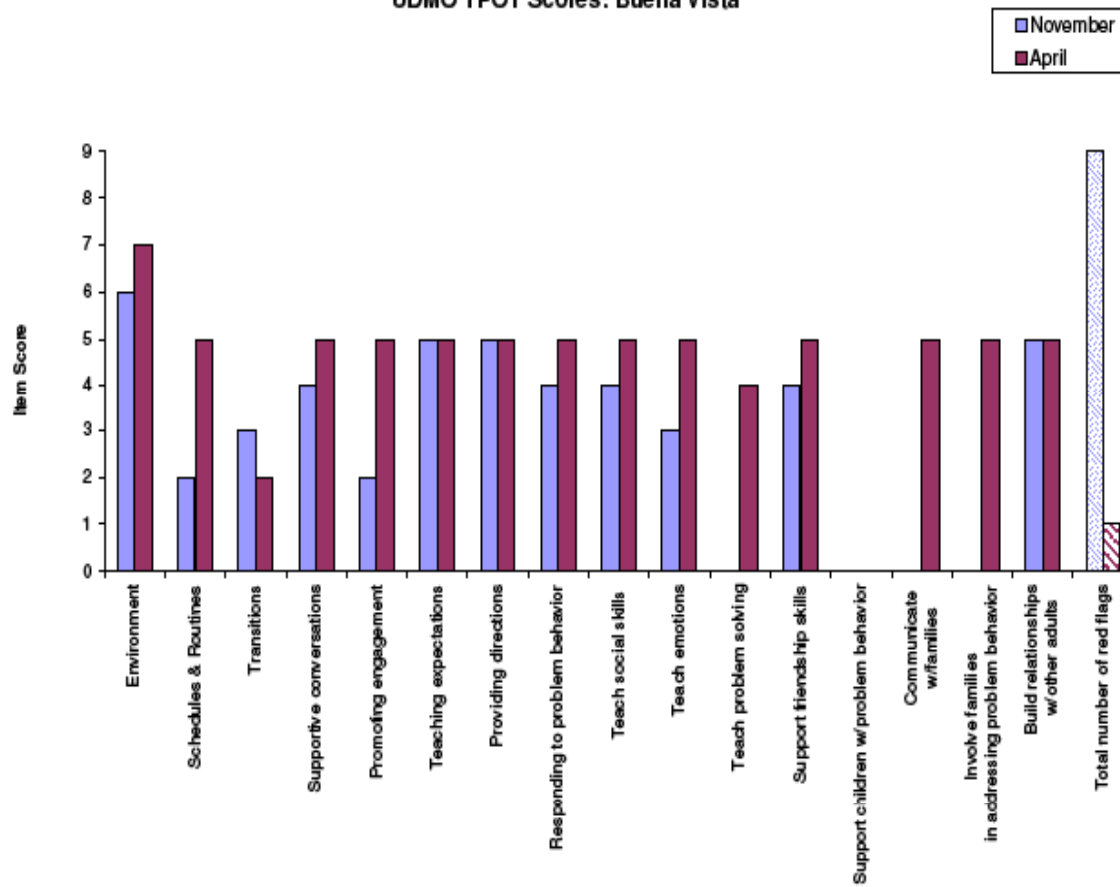


Classroom Implementation Fidelity

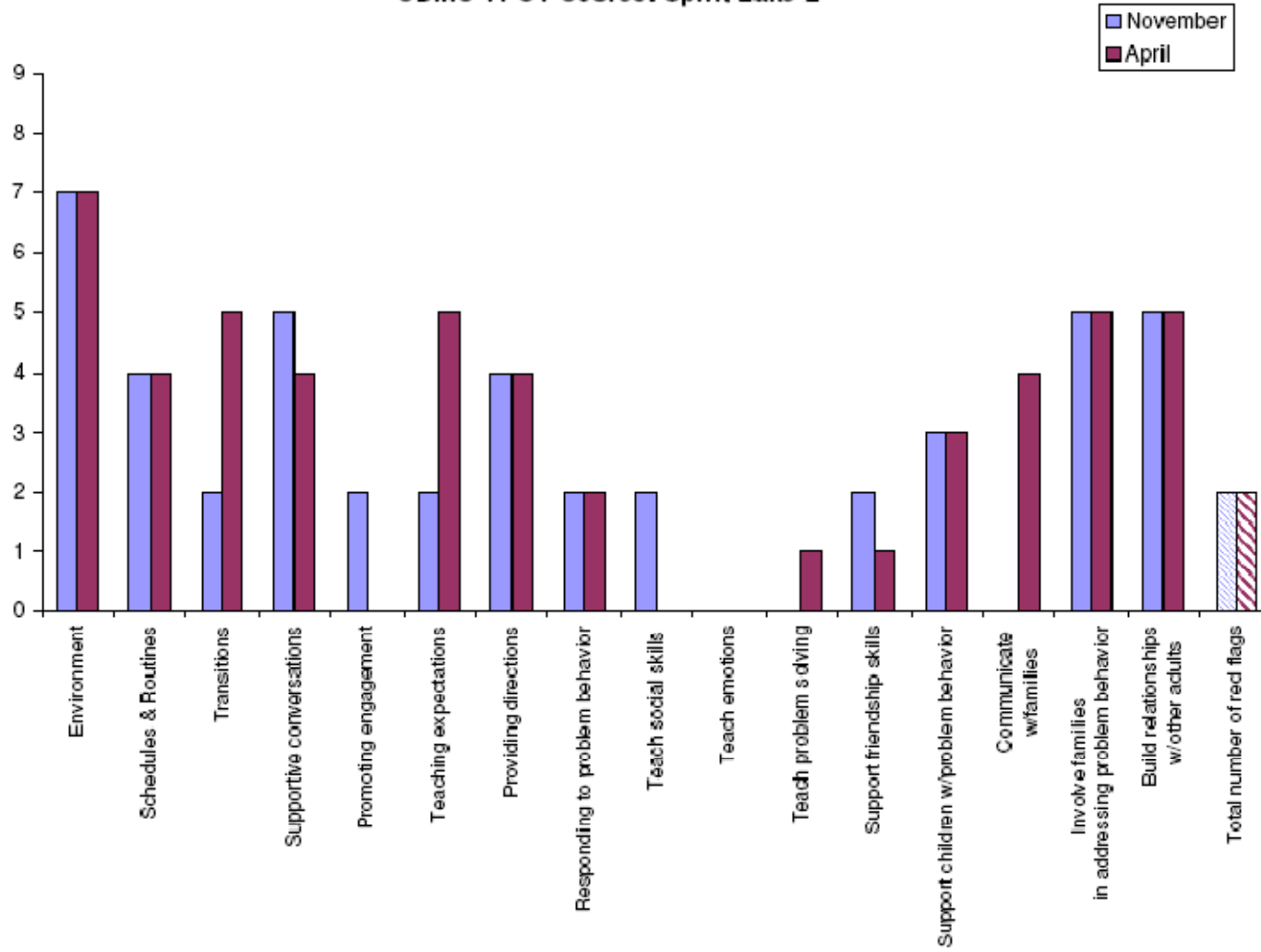
Teaching Pyramid Observation Tool (TPOT)



UDMO TPOT Scores: Buena Vista



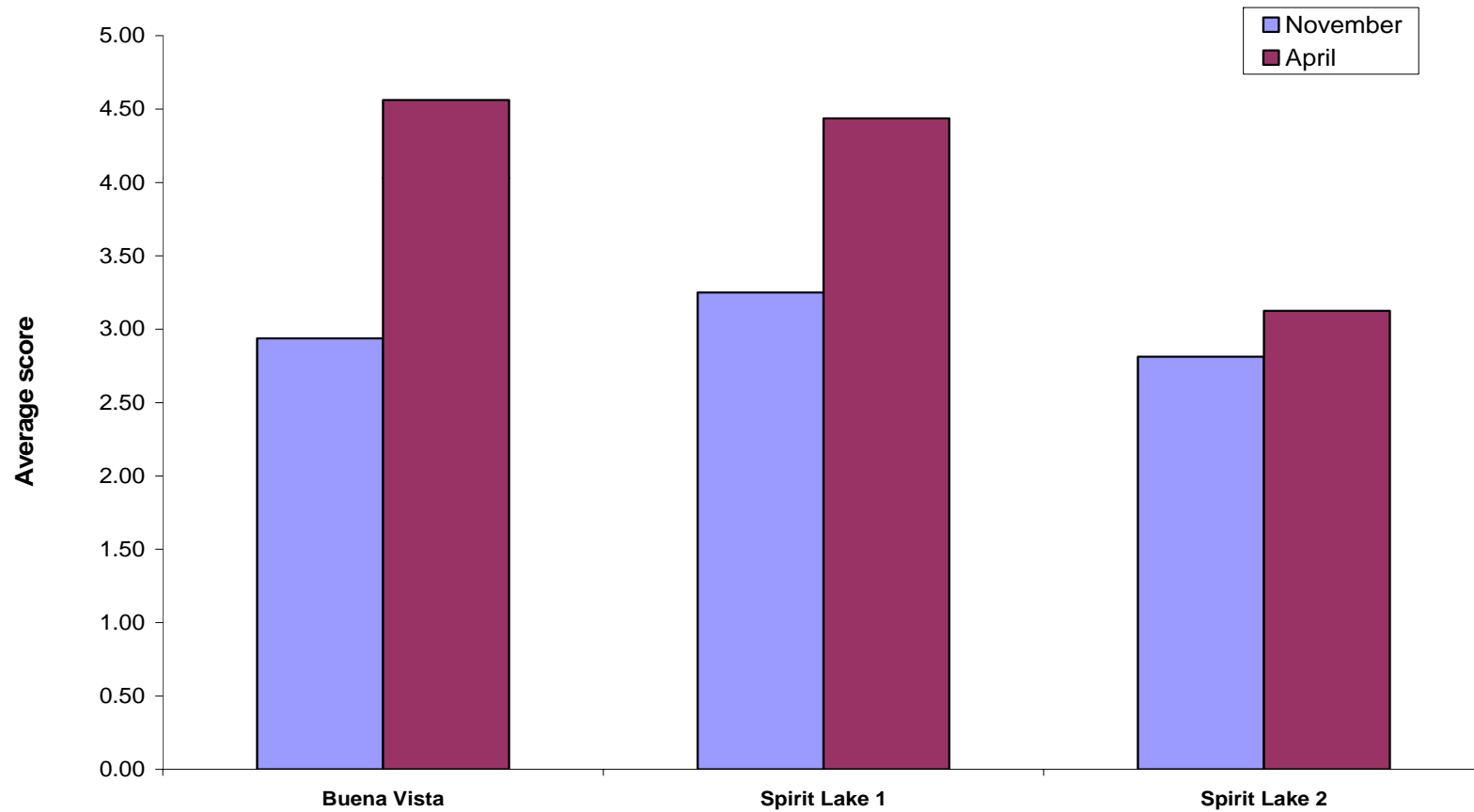
UDMO TPOT Scores: Spirit Lake 2



Overall Classroom Implementation Fidelity

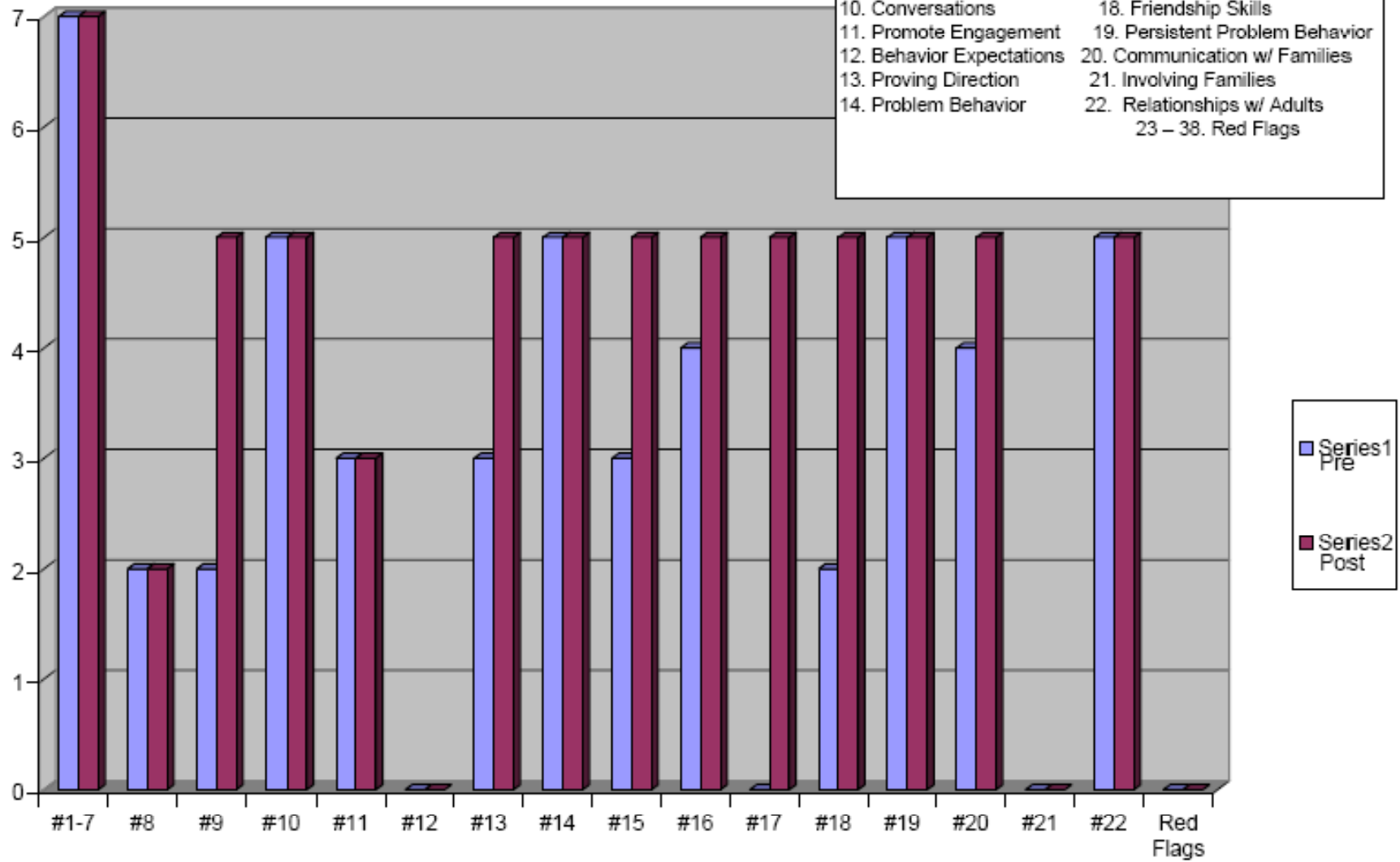


UDMO TPOT Scores: All



Ms. Claudia's Pre-K

- Key**
- 1-7. Environment
 - 8. Schedules
 - 9. Transitions
 - 10. Conversations
 - 11. Promote Engagement
 - 12. Behavior Expectations
 - 13. Proving Direction
 - 14. Problem Behavior
 - 15. Social Skills
 - 16. Express Emotions
 - 17. Problem Solving
 - 18. Friendship Skills
 - 19. Persistent Problem Behavior
 - 20. Communication w/ Families
 - 21. Involving Families
 - 22. Relationships w/ Adults
 - 23 – 38. Red Flags



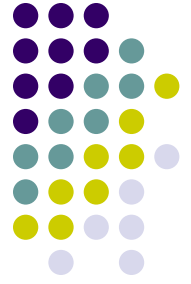


Preliminary TPOT Data

- 130 observations completed
- 23 separate classrooms
- 21 classrooms
 - 2 raters
 - 3 occasions
(126 TPOT observations)
- 2 classrooms
 - 2 raters
 - 1 occasion
(4 TPOT observations)



Some Noteworthy Preliminary Findings



● Red Flags

- Teacher gives group directions to all children in same way
(77 of 130; 59.2%)
- Emotions not generally discussed in classroom
(76 of 130; 58.7%)

● Universal Strategies

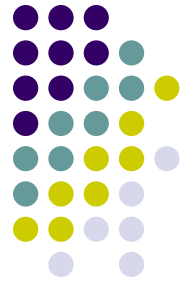
- No classroom rules or program-wide expectations posted
(66 of 130; 50.8%)
- Materials not prepared before children arrive at center or activity
(50 of 130; 38.5%)

More Preliminary Findings



- On average, **43.8% of TPOT indicators observed** across 130 observations
- Range from **10.2% to 80.1%**
- **Challenging behavior** seen in **52%** of observations (68/130)
- **76 of 130 observations** in which no behavioral expectations indicator ($v = 7$) was rated as observed
- **45 of 130 observations** in which no teaching social skills and emotional competencies indicator ($v = 8$) was rated as observed

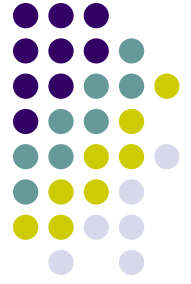
Comparing TPOT Indicators When Challenging Behavior Observed



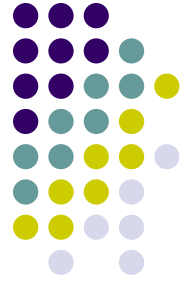
- 68 observations when CB occurred
 - Mean TPOT indicators observed = 43.6 of 108
 - 62 observations when CB did not occur
 - Mean TPOT indicators observed = 51.5 of 108
-
- 41 of 68 (60.3%) observations
 - Only 1 or 2 strategies for responding to problem behavior observed
 - 7 of 68 observations
 - No strategies for responding to problem behavior observed



How Might you Use TPOT Data?

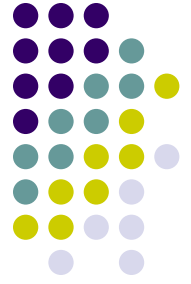


Behavior Incident Reports (BIR)

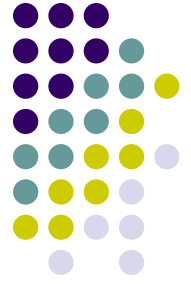


- Form for recording serious behavior incidents
- Monthly graphs may be used for analysis, understanding problem behavior, and data based decision making

BIR Data Drives Decision Making



- Who (teacher, child)
- Where (classroom, hall, outside, etc.)
- When (what activities)
- How often (frequency per month)
- What behaviors



Using Data for Precision

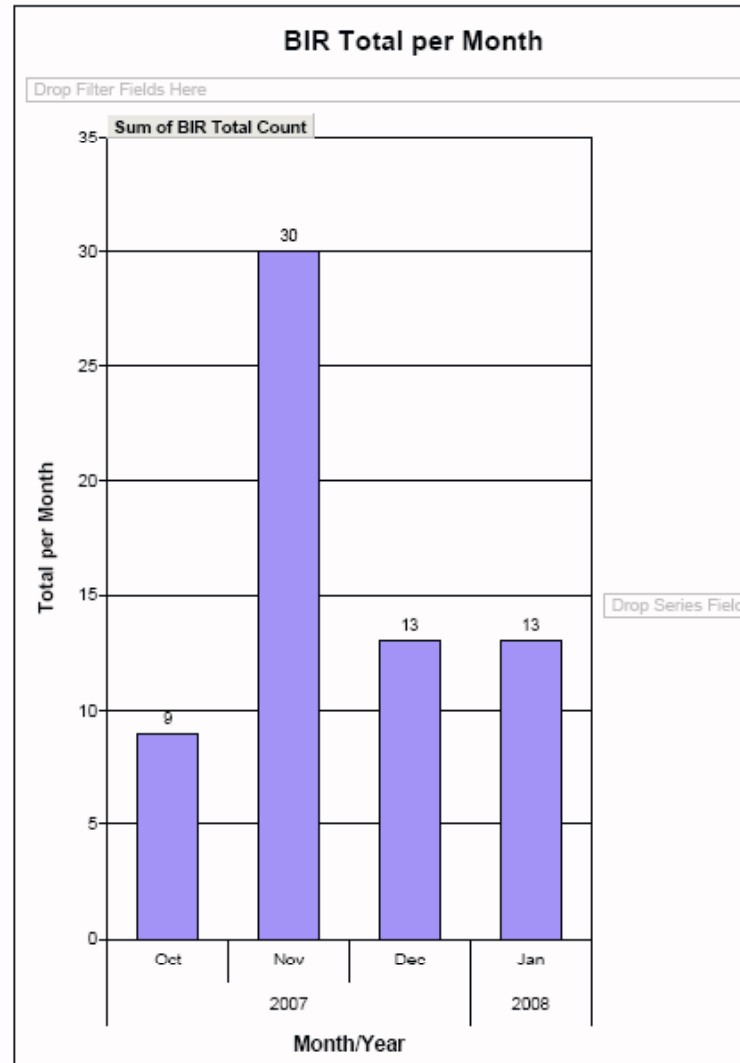
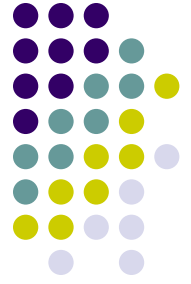
- Classroom is out of control
 - Ms. G has lots of behavior problems
 - Emily is an aggressive child
 - We have a major problem with behavior
- VS.
- Classroom A had 20 behavior incidents last month
 - Ms. G had 12 incidents in October, 3 in November, and 2 in December
 - Emily had 26 incidents of aggression in August
 - The program overall had 32 incidents in September, 48 incidents in October, and 36 incidents in November



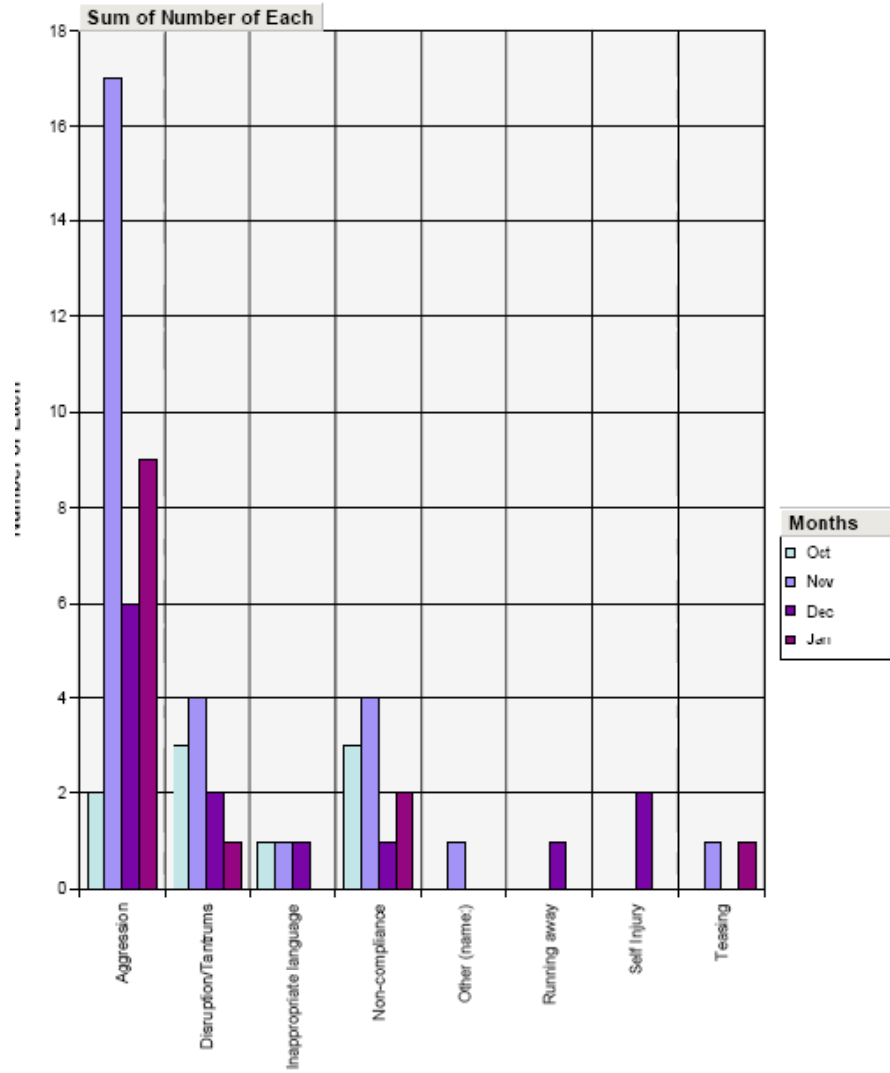
Data-Based Decision Making

- What child needs support?
 - What might explain?
 - What can be done?
- What activities are problematic?
 - What might explain?
 - What can be done?
- What teacher needs support?
 - What might explain?
 - What can be done?
- What are the behaviors that occurring?
 - What might explain?
 - What can be done?
- What is the frequency and what is contributing?
 - What might explain?
 - What can be done?

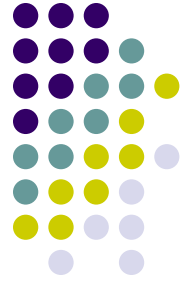
How Often is the Behavior?



What Behaviors?

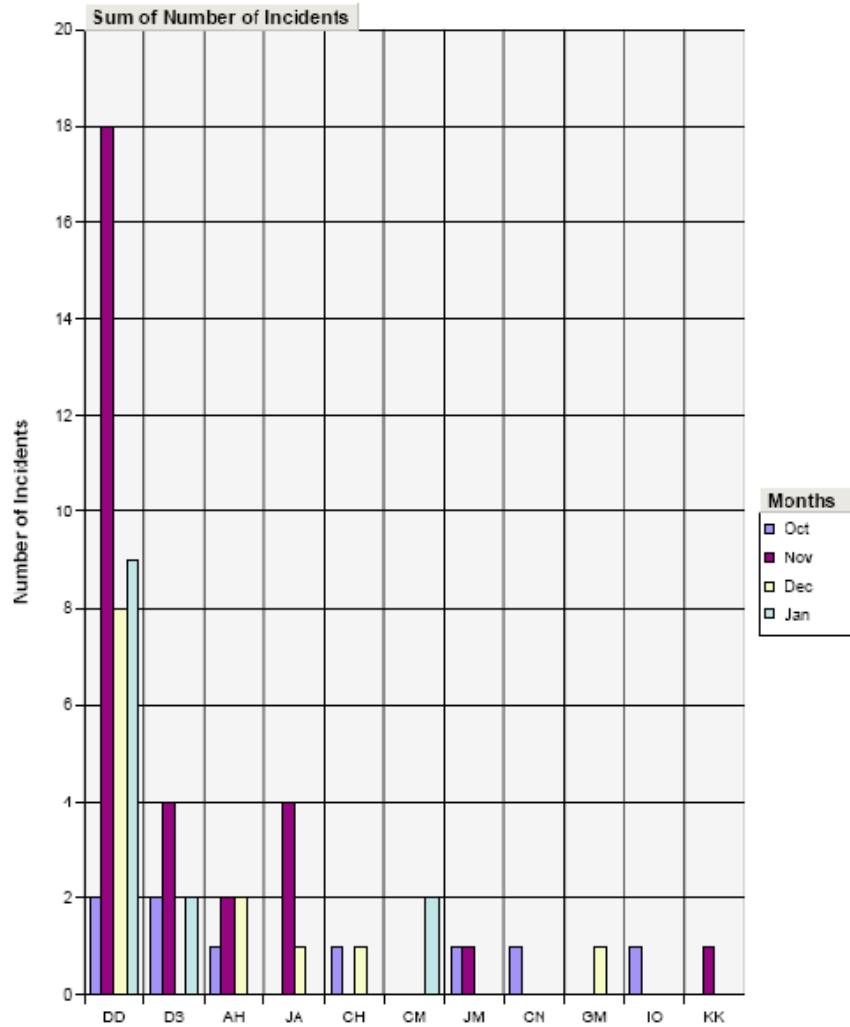


Who is having problem behavior?

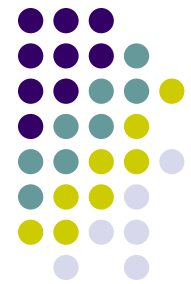


BIR Total by Child and Month

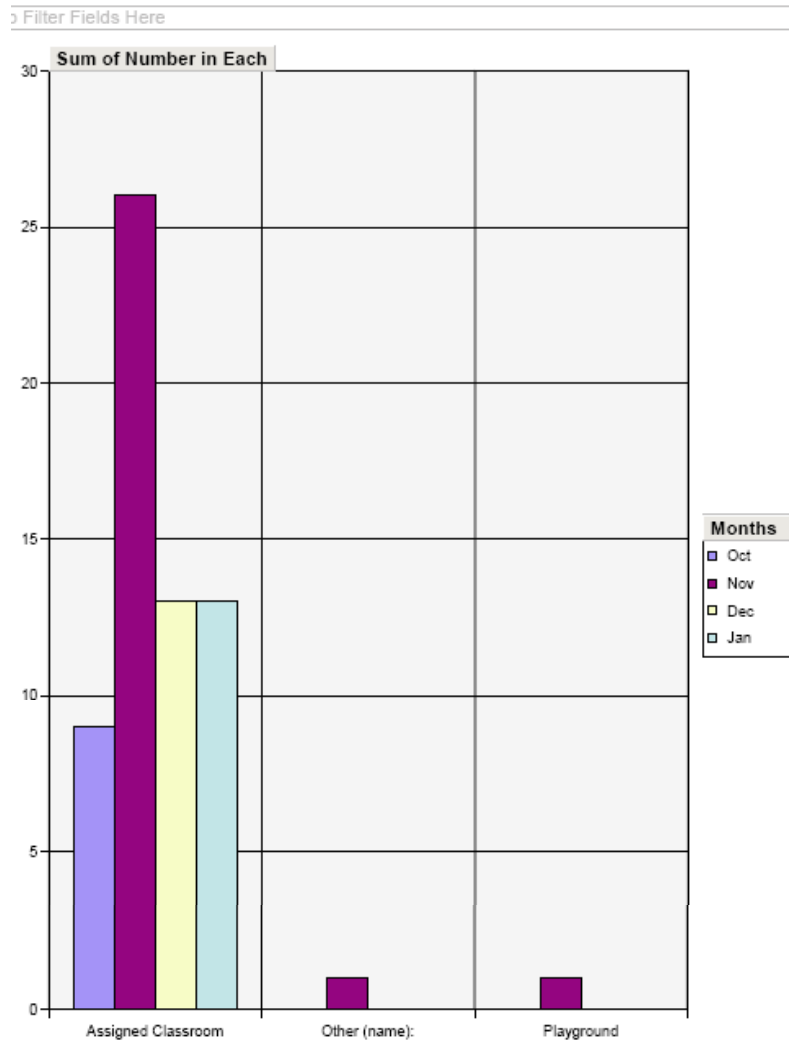
Drop Filter Fields Here



Where is Problem Behavior?



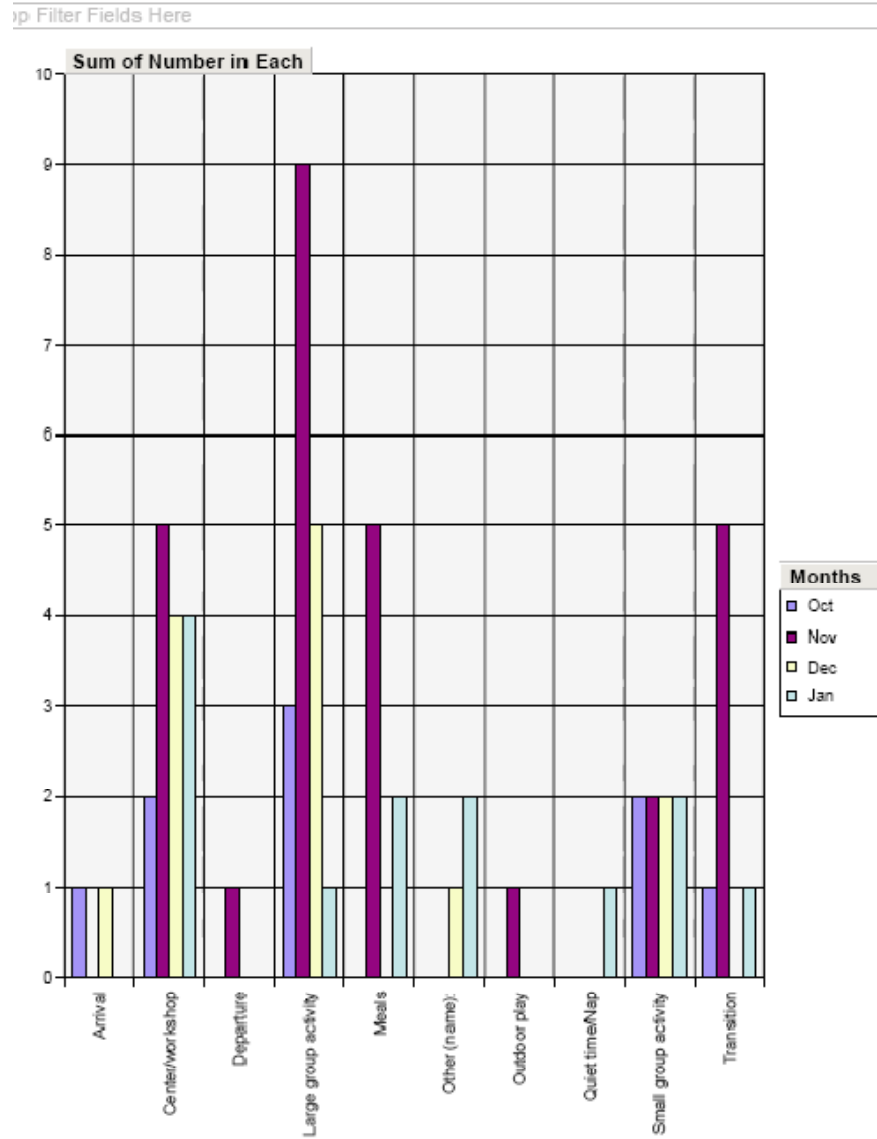
BIR Total by Location and Month



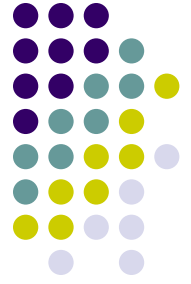
When is problem behavior occurring?



BIR Total by Activity and Month



BIR Practice Activity



- Would you record this behavior on a BIR?
- If yes, try it!

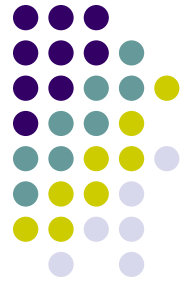
BIR Video Sample 1



BIR Video Sample 2



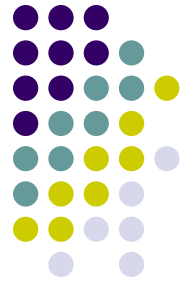
BIR Video Sample 3



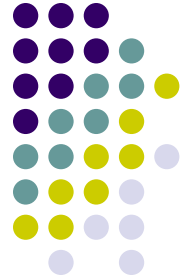
BIR Video Sample 4



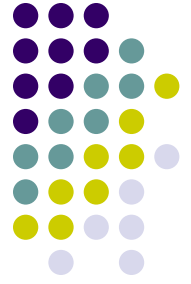
BIR Video Sample 5



Measuring Outcomes

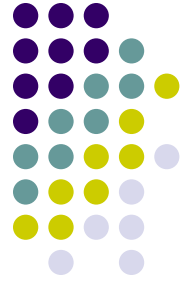


- Moving beyond implementation...
- Example Outcomes Across Levels
 - Program
 - Climate
 - Quality
 - Program incidences (e.g., calls to families, expulsions)
 - Classroom
 - Environment
 - Instruction
 - Interactions
 - Teacher
 - Competence
 - Confidence
 - Job Satisfaction
 - Stress
 - Attitudes
 - Child
 - Social
 - Behavioral
 - Communication
 - Pre-academic
- Others?



Focus on Child Outcomes

- What to measure?
- How to measure?
- How is what is measured used within a decision-making framework?
- Status versus change over time
 - Without implementation of TPOT practices
 - With implementation of TPOT practices



Short Scenario

- 28 children in 2 PreK classrooms
- Each classroom has teacher and teaching assistant
- Teachers in both classrooms report lots of challenging behavior
- TPOT observations conducted in classrooms showed classroom 1 was implementing 34 of 118 TPOT indicators; classroom 2 was implementing 11 of 118 TPOT indicators
- Before training and implementation of Teaching Pyramid began SSRS completed by teachers for each child in classroom

Example of Using Data to Help Make Decisions



- Social Skills Rating System (SSRS; Gresham & Elliott, 1990)
 - Child social skills delay and growth
 - Child behavior delay and growth

Pre-Teaching Pyramid Implementation

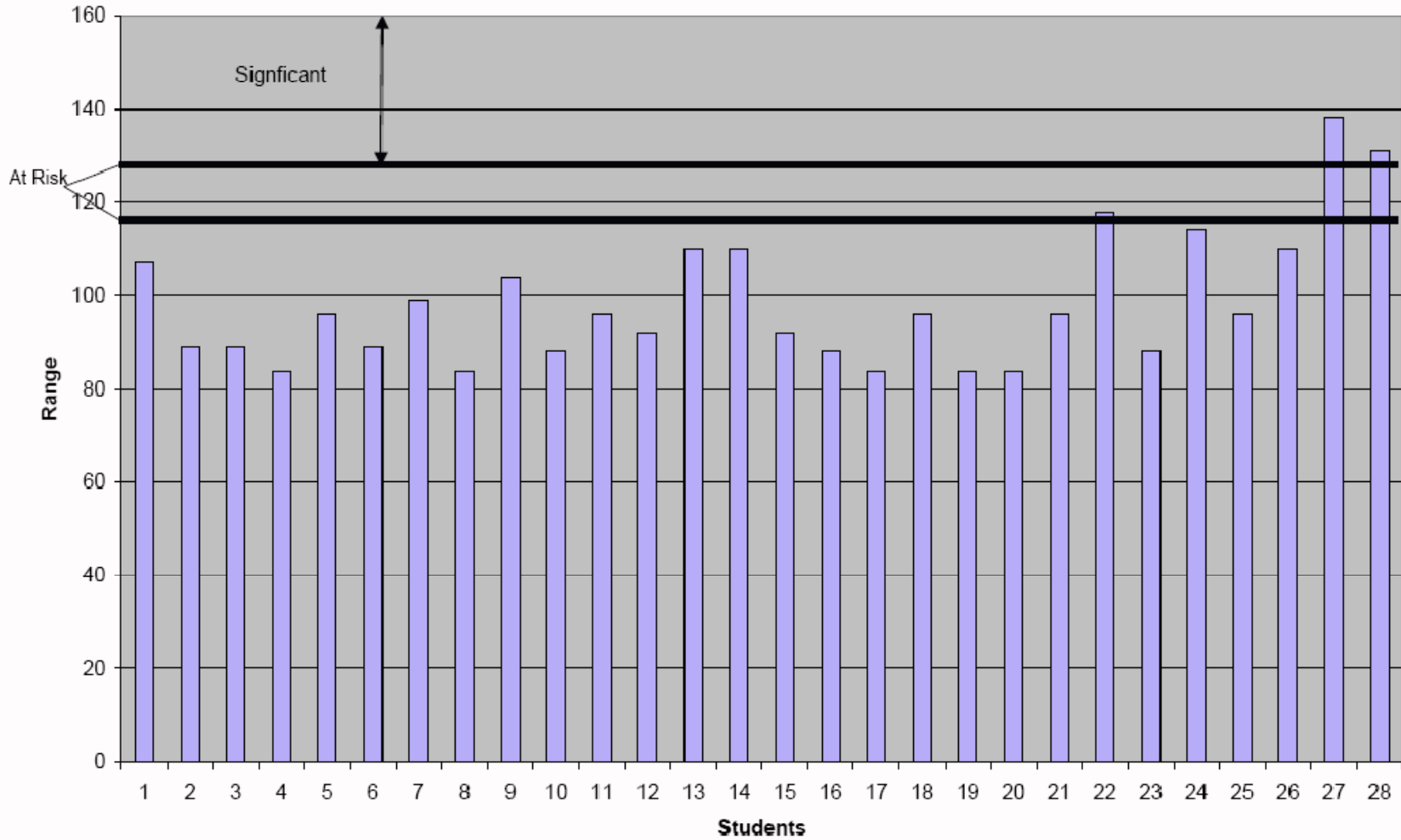


- How might the graphs on the next two pages contribute to data-based decision making?
- What other information would be helpful to inform data-based decision making?
 - Before implementation?
 - After implementation?

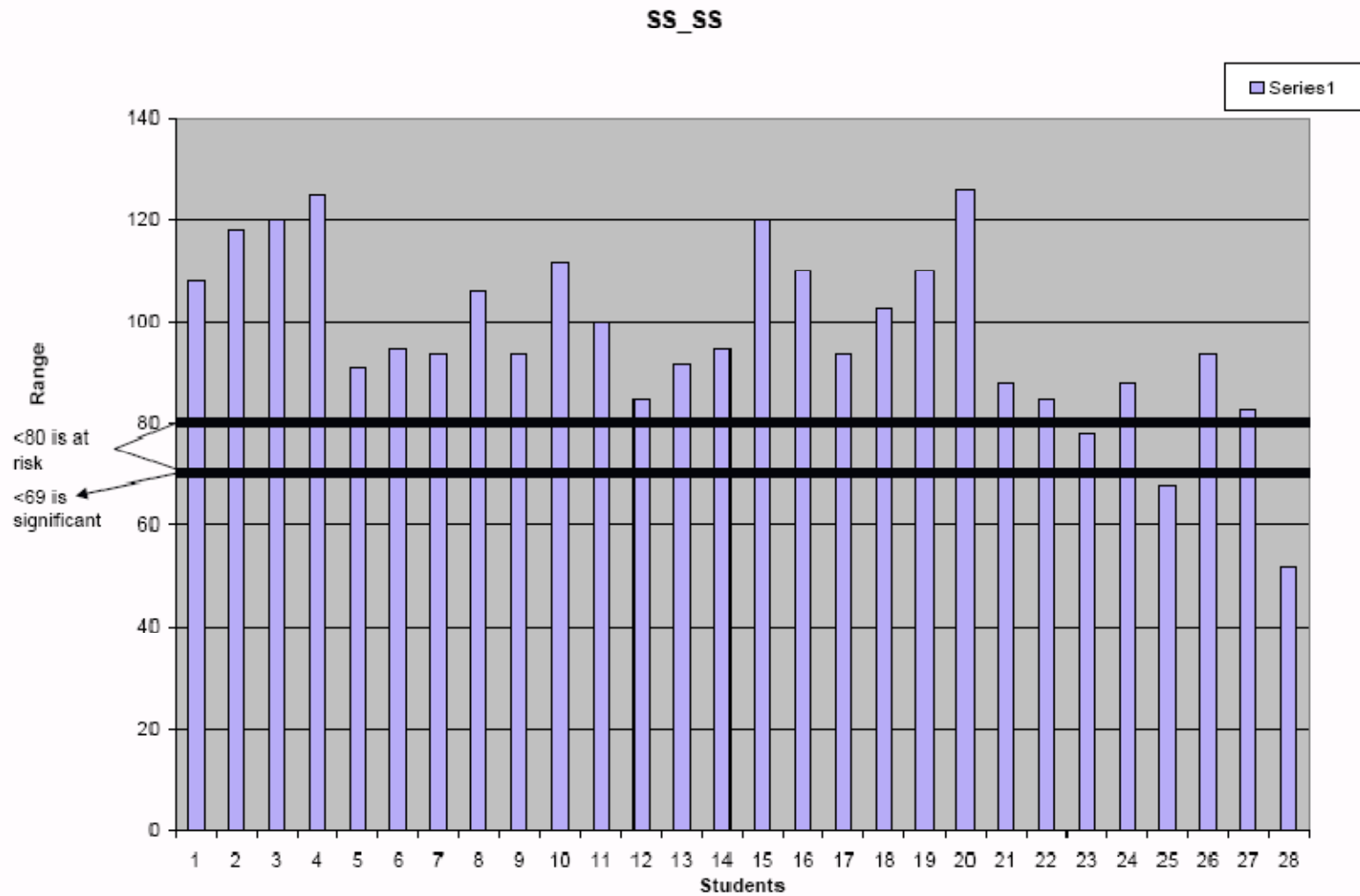
Problem Behavior Scale



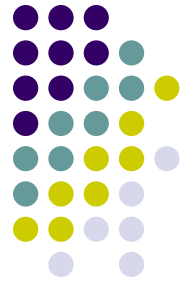
PB_SS



Social Skills Standard Score

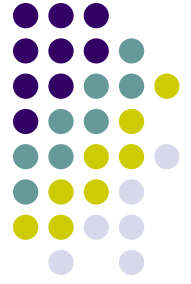


Teaching Pyramid Intervention



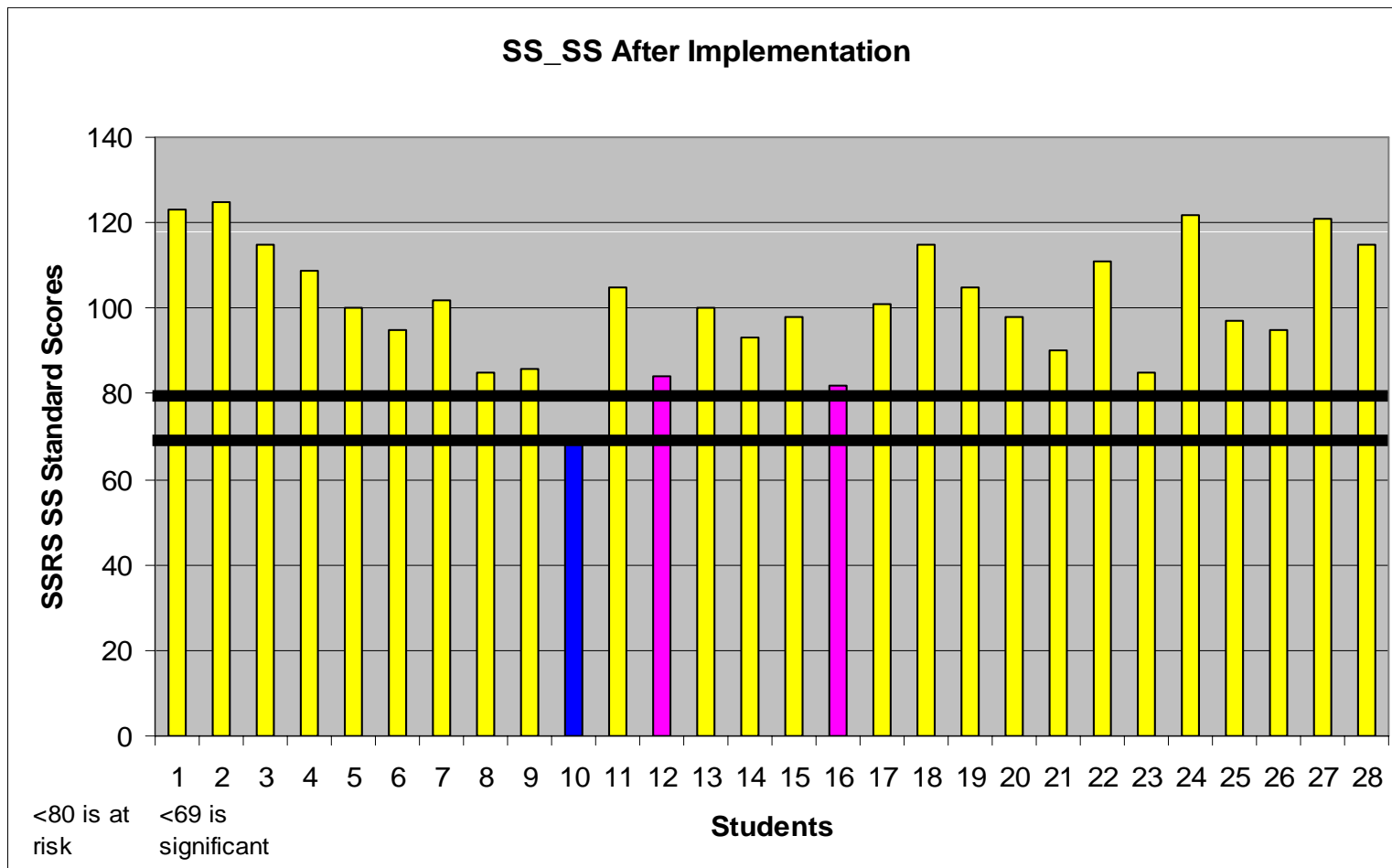
- Teachers participated in high quality workshops focused on the Teaching Pyramid
- Received Implementation Manuals for use during workshops and “back home”
- On-site, expert coaching with performance feedback provided every 3 weeks for 6 months
- Web-based support available with materials and resources

Post Teaching Pyramid Implementation

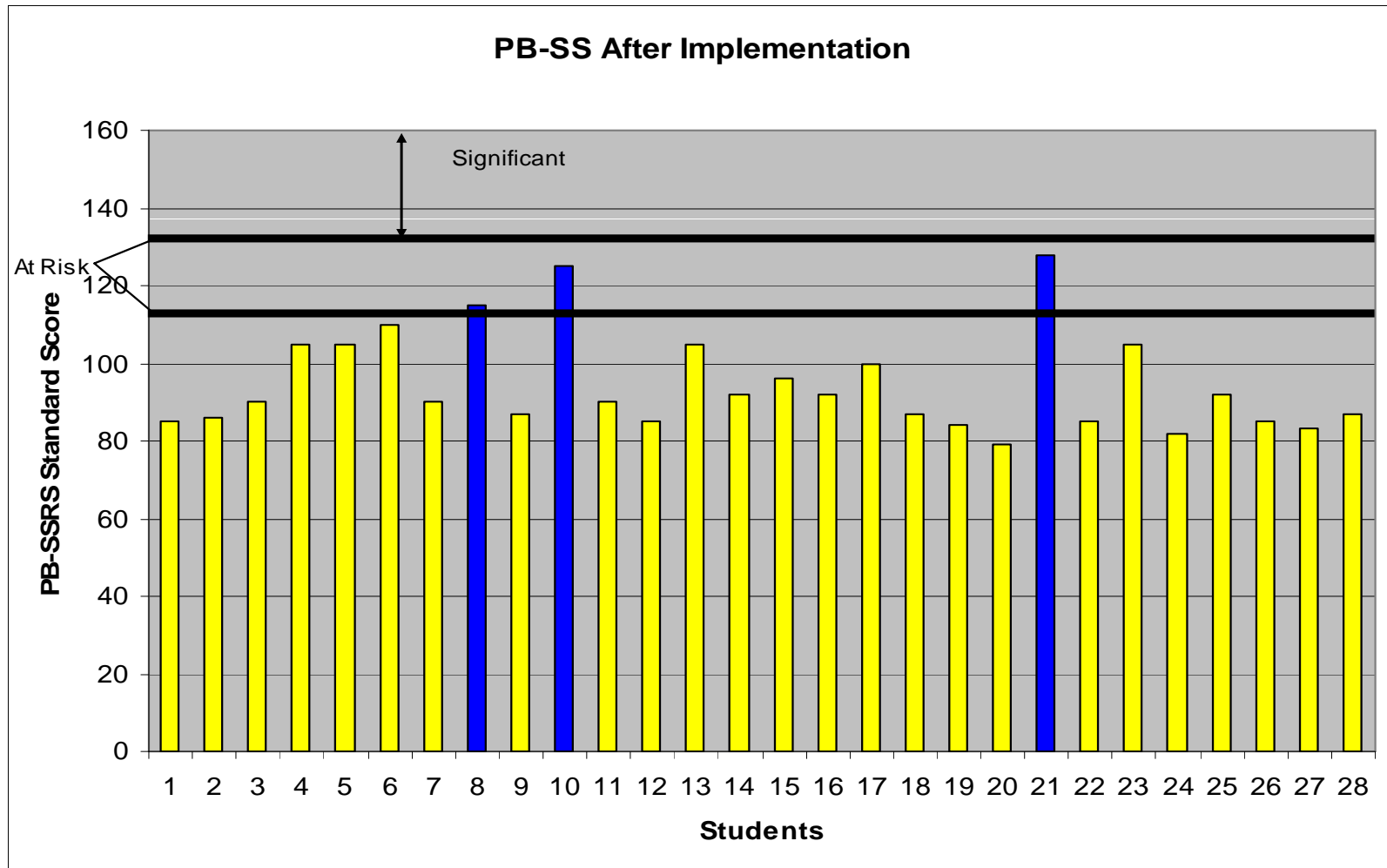
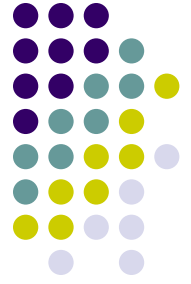


- Classroom 1
 - Implementing 87 of 118 TPOT indicators (74%)
- Classroom 2
 - Implementing 95 of 118 TPOT indicators (81%)

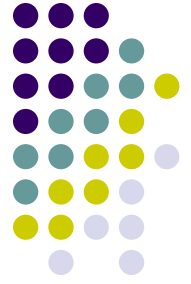
Post Implementation SSRS-SS



Post Implementation SSRS-PB

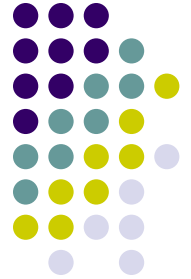


Data-Based Decision Making Revisited



- How would the post-implementation graphs contribute to data-based decision making?
- What other information would be helpful to inform data-based decision making after implementation?

Measuring Outcomes



- Moving beyond implementation...
- Example Outcomes Across Levels
 - Program
 - Climate
 - Quality
 - Program incidences (e.g., calls to families, expulsions)
 - Classroom
 - Environment
 - Instruction
 - Interactions
 - Teacher
 - Competence
 - Confidence
 - Job Satisfaction
 - Stress
 - Attitudes
 - Child
 - Social
 - Behavioral
 - Communication
 - Pre-academic
- Others?



Putting it All Together

- Complete your data collection matrix
- What outcomes or measures have we not discussed?
- What other measures are people using?
- What do you see as barriers to data collection?
- What systems or supports are in place to assist with data collection?
- How can data collection around the Teaching Pyramid be integrated into ongoing data systems?