NCPMI

Roadmap
to Effective Intervention Practices

7

Data Decision-Making and Program-Wide Implementation of the Pyramid Model

Lise Fox, Myrna Veguilla, Jolenea Ferro, and Denise Perez Binder

This document is part of the *Roadmap to Effective Intervention Practices* series of syntheses, intended to provide summaries of existing evidence related to assessment and intervention for social-emotional challenges of young children. The purpose of the syntheses is to offer consumers (professionals, other practitioners, administrators, families, etc.) practical information in a useful, concise format and to provide references to more complete descriptions of validated assessment and intervention practices.

Contents

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Introduction

The *Data Decision-Making and Program-Wide Implementation of the Pyramid Model* roadmap provides programs with guidance on how to collect and use data to ensure: 1) the implementation of the Pyramid Model with fidelity and 2) decision-making that improves the provision of implementation supports, delivery of effective intervention, and the promotion of meaningful child outcomes. The roadmap was originally developed through the contributions and knowledge of multiple faculty members working with the Center on Social and Emotional Foundations for Early Learning (CSEFEL) and the Technical Assistance Center on Social Emotional Intervention for Young Children (TACSEI). Their efforts to develop meaningful measures and data decision-making tools were conducted in partnership with the numerous demonstration sites, programs, coaches, and state leadership teams within states implementing the Pyramid Model. These tools have since been revised by the National Center for Pyramid Model Innovations (NCPMI) and each tool now includes an Excel spreadsheet for data-based decision-making. This document reflects over a decade of collective effort to identify or develop data decision-making tools that are useful, efficient, and reliable. However, it is important to note that the tools provided by this guide do not represent the universe of tools that might be helpful in Pyramid Model implementation. Other useful tools, such as social emotional screening measures and social emotional curricula, have been reviewed in multiple documents on the NCPMI website and through other entities that are focused on the implementation of social emotional intervention.

The Pyramid Model provides a framework for the implementation of practices that will promote the social and emotional competence of all young children including children who have persistent challenging behavior. The practices to be used by practitioners in the implementation of the Pyramid Model are defined in tiers to identify those universal practices that are used to promote the social and emotional outcomes of all children, prevention practices that are designed to provide additional instruction and support to children who might be at risk of social emotional delays or challenging behavior, and practices that are used to implement effective intervention for children with persistent social emotional delays or challenging behavior. Across the country, programs and practitioners implementing the Pyramid Model have found that Pyramid Model practices are effective and result in increases in children's social and emotional competence and a reduction in child challenging behavior. Moreover, they report that practitioners feel more confident and competent when teaching social emotional skills. In addition, there is experimental evidence that the implementation of Pyramid Model practices within a classroom results in improved social and emotional outcomes for all children and a reduction in child challenging behavior among focal children (Hemmeter, Snyder, Fox, & Algina, 2016).

The implementation of the Pyramid Model in a program requires that practitioners have the support to use the practices with fidelity. Those supports, described as *implementation supports*, ensure that practitioners within a program have administrative buy-in, ongoing professional development, and guidance from the program for the implementation of the Pyramid Model (Hemmeter et al., 2013). Programs that implement the Pyramid Model program-wide within their agency or center are typically guided by a leadership team that ensures those implementation supports are in place. The leadership team reflects on the provision of implementation supports through the use of data-based decision-making. This guide includes the tools that leadership teams within local programs can use to collect data, reflect on data patterns, and identify decisions that will ensure the provision of effective supports to practitioners, families, and children.

Data-Based Decision-Making

In this guide, we discuss the use of data for two purposes: assessing the fidelity of implementation and intervention and assessing the outcomes that result from those efforts. Essentially, data are used to address the questions:

▶ Are we doing what we say we are doing? (Implementation and Intervention Fidelity)

▶ Is it making a difference? (Outcomes)

As we ask these two questions, we have made a distinction between implementation fidelity and intervention fidelity. Researchers who are engaged in addressing issues related to implementation have offered useful guidance about the value of that distinction (Dunst, Trivette, & Raab, 2013). Implementation fidelity refers to "the degree to which coaching, in-service training, instruction, or any other kind of evidence-based professional development practice is used as intended…", while intervention fidelity refers to "the degree to which evidence-based intervention practices are used as intended…" (p. 89). For a program to implement an innovation, both implementation and intervention fidelity are critical to achieving meaningful outcomes.

The collection of data is only the first step in a process that is needed for data decision-making. Once data are collected, they must be summarized or displayed for analysis and interpretation. When data are examined within a data decision-making process, the team or practitioner must "ask questions" about what the data might mean while noting the limitations of the data. In addition, the team or practitioner will use multiple data sources to identify and understand the complexity of factors that can influence an issue or concern that might be identified by examining these data. Making a decision based on data is best conducted by a team as multiple perspectives are needed to ensure that interpretations of the data are carefully considered during the inquiry process.

In this document, we will use a simple protocol for the process that teams and practitioners should use when analyzing their data. This protocol involves three steps:

1. **Look –** Examine data for trends, meaningful associations

2. **Think –** Ask questions related to the data that might help with interpretation

3. **Act –** Make decisions as a team and identify the action plan needed to put decisions in place

The data analysis process will begin by thinking about the quality of data and noting whether there are concerns about how data were collected, external factors that might affect interpretation of data, and other considerations that might have had an effect on data. Teams might make notes of those data considerations prior to their review of the data displays.

Look

In the "Look" step, teams should refrain from jumping to an inference about the data. In the initial review, teams should identify what they see factually without coming to conclusions. For example, a statement related to teacher observation data might be "I see that Mr. B has 5 red flags and those have been consistent across both of the formal observations." As teams examine the data, they might:

► Identify patterns

► Make comparisons

► Identify commonalities

► Identify discrepancies

► Look for unexpected results

► Identify questions that result from the data review

► Identify the need to access additional data

Think

In the "Think" step, teams engage in a discussion to make interpretations about the data. The team begins to identify their inferences or conclusions based on the data that offer evidence for those conclusions. During the "Think" step, teams might ask:

► What factors might be associated with the results indicated by the data?

► What areas of the data need more inquiry or additional data to understand?

► What are major themes or conclusions that we are ready to make from our review of the data?

Act

In the "Act" step, teams identify actions that will be implemented in response to conclusions from the data. Team action steps might include multiple actions, the collection of additional data, or a decision to continue to monitor a particular situation or data set. Actions might involve steps related to:

► Changing policy or procedures

► Providing training

► Providing coaching

► Improving response to crises

► Strengthening family relationships

► Working with collaborators

► Improving leadership team functioning

► Improving data collection and analysis procedures

► Addressing other factors related to the issue or concern

Pyramid Model Data Decision-Making Tools

The tools presented in this section are only some of the tools that teams and practitioners might use as they ensure implementation and intervention fidelity and determine the supports needed by practitioners, children, and families. Other tools that are often used in early childhood programs include: environmental rating scales (e.g., ECERS), assessments of classroom quality (e.g., CLASS), child progress monitoring (e.g., Teaching Strategies Gold, IEP or IFSP goal progress monitoring), attendance data, demographic data for children and practitioners, outcome monitoring data (e.g., OSEP child outcomes), family engagement measures, and practitioner fidelity checklists. The tools listed in this document are those that are designed for use in the implementation of the Pyramid Model.

In this section, we describe each tool briefly and provide information for accessing the tool. NCPMI has posted tools, data entry spreadsheets for summary and analysis, and companion materials on the Data Decision-Making webpage.

Find all NCPMI Data Decision-Making tools and resources online at:

https://challengingbehavior.org/Implementation/Data

Program Fidelity Tools
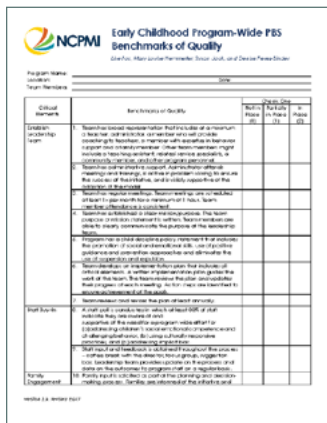

Early Childhood Program-Wide PBS Benchmarks of Quality v. 2.0

https://challengingbehavior.cbcs.usf.edu/docs/BoQ_EarlyChildhood_Program-Wide.pdf

Authors: Lise Fox, Mary Louise Hemmeter, Susan Jack, and Denise Perez Binder (2017)

The Benchmarks of Quality (BoQ) is designed to help programs evaluate their progress toward implementing the Pyramid Model program-wide. In 2017, this tool was revised to include critical elements to address issues related to equity and culturally responsive practices. This checklist is completed by each program's leadership team to assess progress along the nine critical elements of implementation. The initial administration of the Benchmarks provides teams with a baseline on program implementation status and guidance for developing initial implementation plans. The Benchmarks of Quality is updated bi-annually (or more frequently if desired) by teams to examine their progress with program-wide implementation fidelity.

The Benchmarks of Quality questions are categorized into seven critical elements: (a) establish a leadership team, (b) staff buy-in, (c) family engagement, (d) program-wide expectations, (e) professional development and staff support plan, (f) procedures for responding to challenging behavior, and (g) monitoring implementation outcomes. Each question is rated on a 0 (not in place) to 2 (in place) scale.
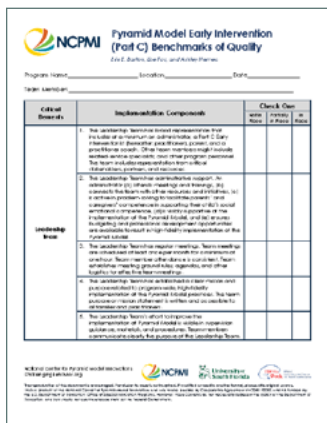
Pyramid Model Early Intervention (Part C) Benchmarks of Quality v. 1.0

https://challengingbehavior.cbcs.usf.edu/docs/EI_PartC_BoQ_v1_form.pdf

Authors: Erin E. Barton, Lise Fox, and Ashley Nemec (2018)

The Pyramid Model Early Intervention (Part C) Benchmarks of Quality (EI BoQ) is designed to help early intervention agencies or programs evaluate their progress toward implementing the Pyramid Model program-wide. This tool was revised in 2018. The Benchmarks of Quality for early intervention examines implementation of 30 practices related to data-based decision-making, assessment driven supports and intervention, and home visitor support within each tier of the Pyramid Model. Each practice is rated on a 0 (not in place) to 2 (in place) scale. This checklist is completed by each program's leadership team to assess progress along the six critical elements of implementation. The initial administration of the Benchmarks provides teams with a baseline on program implementation status and guidance for developing initial implementation plans. The Benchmarks of Quality is updated bi-annually (or more frequently if desired) by teams to examine their progress with program-wide implementation fidelity.
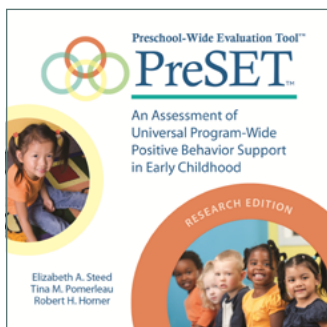

Preschool-Wide Evaluation Tool (PreSET™) Research Edition. Assessing universal program-wide PBS in early childhood programs

Available from Paul H. Brookes Publishing, BrookesPublishing.com

Authors: Elizabeth A. Steed, Tina M. Pomerleau (2012)

The PreSET provides a reliable tool that can be used by an external evaluator to examine how well the universal level of program-wide positive behavior intervention and support (PW-PBIS) is being implemented. The Pre-SET examines the following factors: (1) expectations defined; (2) behavioral expectations taught; (3) responses to appropriate and challenging behavior; (4) organized and predictable environment; (5) monitoring and decision

making; (6) family involvement; (7) management; and (8) program support. Interviews and observations are conducted in each classroom and with the program administrator.
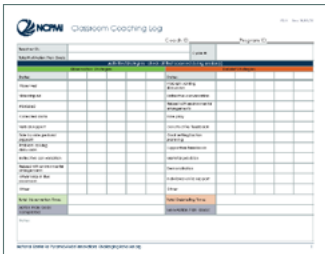
Classroom Coaching Log

https://challengingbehavior.cbcs.usf.edu/docs/coaching_log.pdf

Practice-Based Coaching is used to support teachers in their implementation of Pyramid Model practices. Coaching log data provide a summary of the number and duration of coaching cycles that were provided to teachers, record of action plan goals developed and met, and a description of the professional development strategies used during coaching contacts. Coaches record these data on the log or into the coaching log spreadsheet for summary. Data are used to analyze whether the coach implements full coaching cycles, the success of coaching strategies, or how strategies might be changed to improve teacher practices.

Early Intervention Practitioner Coaching Log

https://challengingbehavior.cbcs.usf.edu/docs/Coaching_Log-Strategies_EI.pdf

Practice-Based Coaching is provided to support early interventionist in their use of Pyramid Model practices as they work with families. Practitioner coaching log data provides a summary of the number and duration of coaching cycles that were provided to early interventionists, record of action plan goals developed and met, and a description of the professional development strategies used during coaching contacts. Coaches record these data on the log or into the coaching log spreadsheet for summary.

Practitioner Fidelity Tools
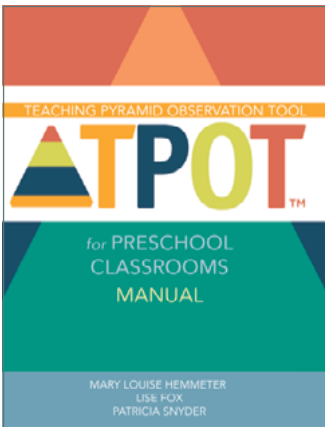
Teaching Pyramid Observation Tool (TPOT™) for Preschool Classrooms

Available from Paul H. Brookes Publishing, BrookesPublishing.com

Authors: Mary Louise Hemmeter, Lise Fox, and Patricia Snyder (2014)

The Teaching Pyramid Observation Tool (TPOT™) for Preschool Classrooms, Research Edition is used to assess the implementation of the Pyramid Model in classrooms for children who are 2-5 years old. The TPOT is scored based on an observation of at least two hours and an interview with the teacher following the observation. Observations should be conducted during structured large-group and unstructured child-directed time. The TPOT is organized in three subscales: Pyramid Model Key Practice Items; Red Flags; and Responses to Challenging Behavior. The Key Practices subscale provides information about the implementation of 114 indicators of practices related to 14 key practice items. The Red Flags subscale provides information on whether the teacher is using practices that might impede implementation of the Pyramid Model or conflict with promoting children's social and emotional growth. The Responses to Challenging Behavior subscale summarizes the use of three essential practices that should be used in response to challenging behavior.
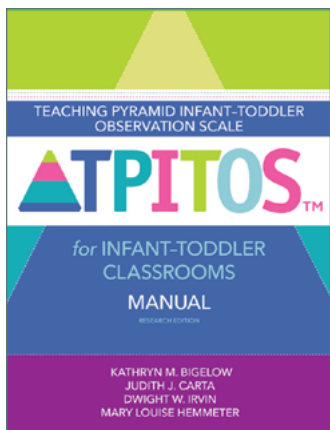
Teaching Pyramid Infant-Toddler Observation Scale (TPITOS™) for Infant-Toddler Classrooms

Available from Paul H. Brookes Publishing, BrookesPublishing.com

Authors: Kathryn M. Bigelow, Judith J. Carta, Dwight W. Irvin, and Mary Louise Hemmeter (2019)

The Teaching Pyramid Infant -Toddler Observation Scale (TPITOS™) for Infant-Toddler Classrooms is a tool similar to the TPOT™ that measures implementation of Pyramid Model practices in infant-toddler classrooms. It focuses on the observation of adult behaviors and environmental arrangements specific to supporting the social-emotional development of infants and toddlers. The TPITOS is scored based on a two-hour observation, of at least three different routines with at least three children present, followed by an interview of the teacher being observed. This tool consists of three types of items: a) observational items; b) interview items; and c) Red Flags. Each item is scored either yes or no based on the observation and/or interview. Programs may score teachers in a classroom separately or decide to only score an individual teacher.

Early Interventionist Pyramid Practices Fidelity Instrument (EIPPFI) Field Test Edition 1.0

https://challengingbehavior.cbcs.usf.edu/Implementation/data/EIPPFI.html

Authors: Erin E. Barton and Ashley Nemec (2019)

The Early Intervention Pyramid Practice Fidelity Instrument (EIPPFI) Field Test Edition 1.0 is used to assess the implementation of Pyramid Model practices by early interventionists in the coaching of family caregivers. EIPPFI practices are aligned with the Division for Early Childhood Recommended Practices and the Principles of Early Intervention. EIPPFI organizes practices within six practice categories: 1) Building Partnerships with Families; 2) Social Emotional Development; 3) Family-centered Coaching; 4) Dyadic Relationships; 5) Children with Challenging Behavior; and 6) Social Emotional Assessment.

Addressing Challenging Behavior

Behavior Incident Report System (BIRS)

https://challengingbehavior.cbcs.usf.edu/Implementation/data/BIRS.html

The Behavior Incident Report System (BIRS) provides early care and education programs with a system to collect and analyze behavior incidents in their program. The system provides an efficient mechanism for gathering information on elements related to behavior incidents that can be used analytically to make decisions about providing supports to teachers and children within the program. Teachers within programs collect data on behavior incidents that are not developmentally normative or are a cause of concern to the teacher. These data are summarized monthly to provide formative data for examining factors related to behavior incidents (child, teacher, activity, behavior type, behavior motivation, and responses to the behavior). In addition, these data provide summative information on the frequency of behavior incidents over time and an analysis of potential equity issues by calculating disproportionality related to race, ethnicity, IEP status, gender, and dual language learner status.
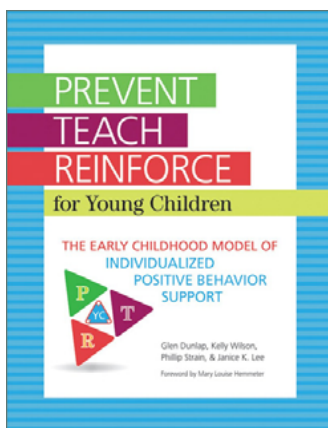
Prevent-Teach-Reinforce for Young Children
Available from Paul H. Brookes Publishing, BrookesPublishing.com

Authors: Glen Dunlap, Kelly Wilson, Phillip S. Strain, and Janice K. Lee (2013)

Prevent-Teach-Reinforce for Young Children (PTR-YC) is used by teams to design individualized behavior support plans and track child progress in skill acquisition and behavior reduction. The book comes with planning forms and worksheets tailored for early childhood programs, including a Goal Sheet, Daily Log, Behavior Rating Scale, Intervention Menu, and Team Implementation Guide. The behavior rating scale provides data on the effectiveness of behavior support plans that are developed as intensive, individualized interventions.
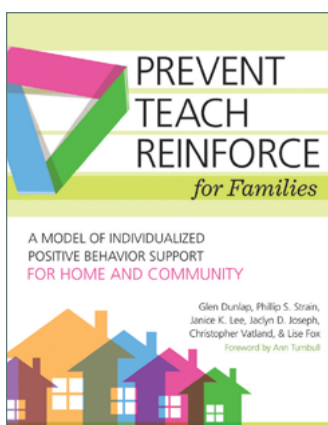
Prevent-Teach-Reinforce for Families
Available from Paul H. Brookes Publishing, BrookesPublishing.com

Authors: Glen Dunlap, Phillip S. Strain, Janice K. Lee, Jaclyn D. Joseph, Christopher Vatland, and Lise Fox (2017)

Prevent-Teach-Reinforce for Families (PTR-F) is used to design individualized behavior support plans in partnership with families for implementation in home and community settings. It is an extension of PTR-YC as described above. The guide is designed for use by professionals to collaborate with families to identify intervention goals, conduct a functional behavioral assessment, design an intervention plan, provide coaching and monitor plan implementation and child progress.

Using Data: Leadership Teams

The Leadership Team should examine data monthly and make decisions that result in greater implementation and intervention fidelity. In addition, they will use data to address problems, concerns, and identify areas of growth. Table 1, on the following page, is an evaluation matrix that describes some of the data tools that might be used by the Leadership Team for data decision-making related to implementation of the Pyramid Model within classroom and early intervention programs. Leadership teams will find Excel spreadsheets that are designed to provide graphic summaries of data for analysis by the team and Look-Think-Act data discussion guides on the NCPMI Data Decision-Making webpage.

The Leadership Team collects data at the beginning and end of the school or program year using a set of tools to evaluate the impact of the Pyramid Model practices on programs, classrooms and children. All programs, regardless of the ages of the children, complete the Benchmarks of Quality to measure the implementation of their program wide supports. Programs that provide Part C early intervention services complete a Benchmarks of Quality that is tailored for that program service delivery model. Practitioner coaches who work with early interventionists, teachers, other practitioners complete a coaching contact log monthly to document their coaching activities and the strategies used within those interactions. To measure practitioners' current implementation and changes in classroom practices, the Teaching Pyramid Infant-Toddler Observation Scale (TPITOS™) is used to assess infant-toddler classrooms, and the Teaching Pyramid Observation Tool (TPOT™) is used in preschool classrooms. In early intervention programs, the Early Interventionist Pyramid Practices Fidelity Instrument (EIPPFI) is used to assess the use of Pyramid Model practices in the delivery of early intervention services to infants, toddlers, and their families. Programs also collect data on actions related to challenging behavior and child behavior incidents. In Pyramid Model implementation, programs should also be using a screening measure to identify children in need of social or emotional intervention and social emotional assessment to guide intervention planning. Individualized progress monitoring tools are also used to examine the effect of intervention efforts for children with social emotional intervention plans and for children with behavior support plans.

Table 1. Evaluation Matrix for Program-Wide Implementation

Tool	Collection Interval	By Whom
▶ Early Childhood Program-Wide PBS Benchmarks of Quality (center programs) **OR** ▶ Pyramid Model Early Intervention (Part C) Benchmarks of Quality	Pre-Implementation and Annually	Implementation site leadership team
▶ Classroom Coaching Log **OR** ▶ Early Intervention Practitioner Coaching Log	Monthly	Practitioner Coaches
▶ Teaching Pyramid Observation Tool (TPOT™) ▶ Teaching Pyramid Infant-Toddler Observation Scale (TPITOS™) for Infant-Toddler Classrooms ▶ Early Interventionist Pyramid Practices Fidelity Instrument (EIPPFI)	Bi-Annually	Practitioner Coaches
▶ Behavior Incident Report System (BIRS)	Collected daily as incidents occur	Classroom practitioners complete following an incident
▶ Social emotional screening tool*	Following screening guidelines recommended by authors	Classroom practitioners, Early interventionists, or parents
▶ Social emotional assessment*	Follow guidelines recommended by authors	Classroom practitioner or Early Interventionists
▶ Progress monitoring	Two times per week for children with intervention plans	Classroom practitioner or Early Interventionists

Using tools for young children adopted by the service agency or program

Benchmarks of Quality

The Benchmarks of Quality (BoQ) measures the extent to which critical elements of program-wide implementation are in place within the program. Questions are scored from 0 (not in place) to 2 (in place). Program leadership teams complete the Benchmarks at the beginning of the year as a guide for action planning and should update it on a regular basis as their teams meet. The scores from the Benchmarks of Quality can be summarized using the scoring workbook provided on the NCPMI Data Decision-Making webpage.

On the following pages we have provided sample summary data from the Benchmarks of Quality for Program-Wide Implementation and the Benchmarks of Quality used by early intervention programs or agencies. We also provide worksheets that might be used by Leadership Teams as they examine the data from the Benchmarks of Quality. These worksheets guide the team in what questions might be used for each step of the data analysis process: Look, Think, Act. The Excel spreadsheet and Look-Think-Act are provided on the NCPMI Data Decision-Making webpage.

Sample Early Childhood Program-Wide PBS Benchmarks of Quality Data

In the first graph, the second time the BoQ was completed the leadership team sees progress in all critical elements but staff buy-in. Additional graphs and tables show the percent of indicators in place, partially in place, or not in place. Indicators not in place (7%) are highlighted and identified by number. The number of indicators partially in place (37%) are identified for each key element. Using the Look-Think-Act process, the team prioritizes key practices for which there was no progress (i.e., staff buy-in) and the practices that have the fewest items fully in place (i.e., family engagement and procedures for responding to challenging behavior). Thinking about the data and reviewing their action plan, the team asks questions that pinpoint how resources, professional development, or commitment have affected progress. The result is updated goals or new goals to address the identified concerns.

Download the Early Childhood Program-Wide Benchmarks of Quality Look-Think-Act discussion guide to review the program-wide BoQ data summaries.

https://challengingbehavior.cbcs.usf.edu/docs/LTA_ECBoQ.pdf

Early Childhood Program-Wide PBS Benchmarks of Quality

Percent of Indicators in Place
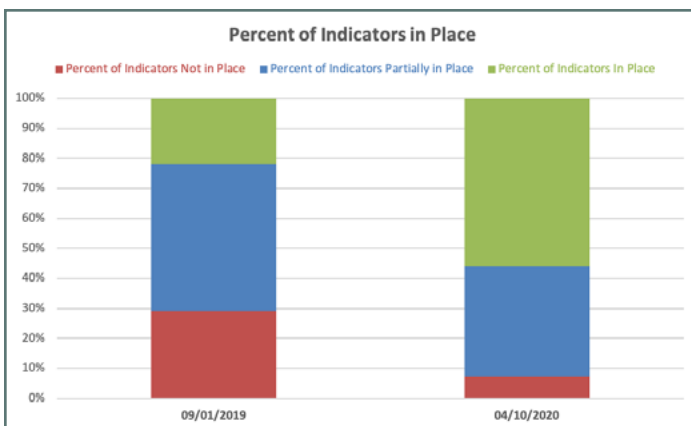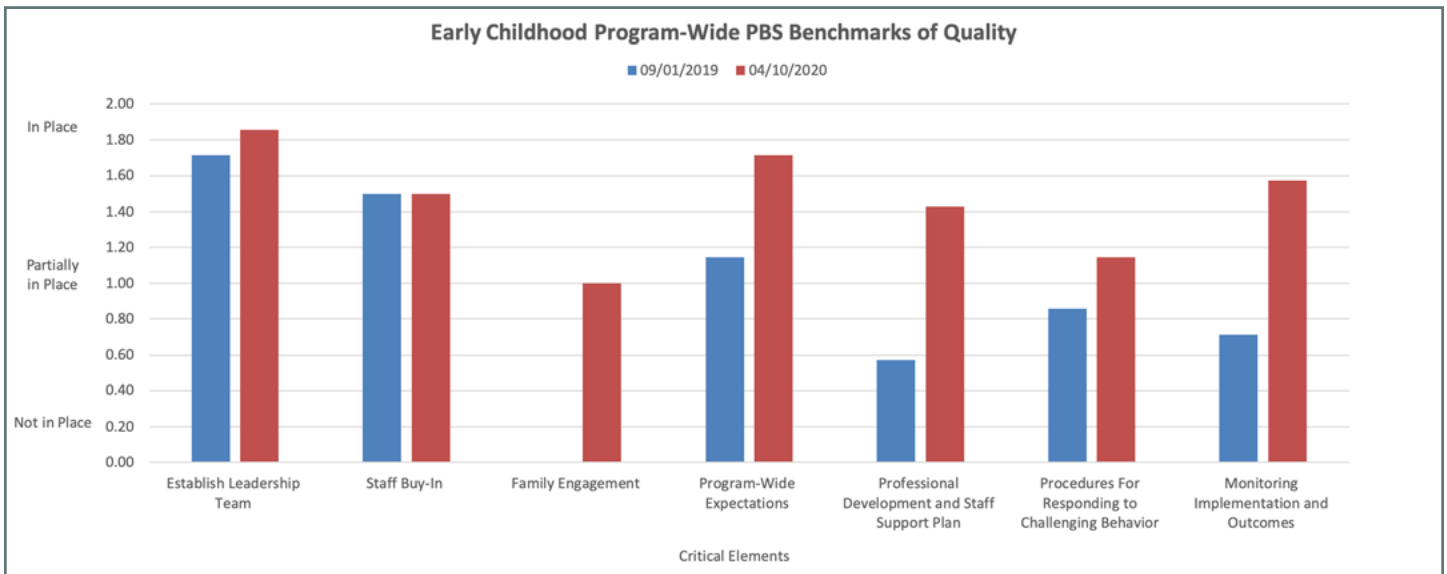
	09/01/2019	04/10/2020
Percent of Indicators Not in Place	29%	7%
Percent of Indicators Partially in Place	49%	37%
Percent of Indicators In Place	22%	56%

4/10/20	# of Indicators		
	Not in Place	Partially in Place	In Place
Establish Leadership Team	0	1	6
Staff Buy-In	0	1	1
Family Engagement	1	2	1
Program-Wide Expectations	0	2	5
Professional Development and Staff Support Plan	1	2	4
Procedures for Responding to Challenging Behavior	1	4	2
Monitoring Implementation and Outcomes	0	3	4

Benchmarks Not In Place:

		13		
			26	
				34

Sample Early Intervention (Part C) Benchmarks of Quality Data

The Early Intervention (Part C) BoQ provides the same graphs and tables. In this graph, the data show progress over three implementations of the BoQ with all indicators at least partially in place and indicators for two critical elements fully in place. The team's think process will identify challenges for fully implementing the remaining indicators and develop action plan goals based on that analysis.
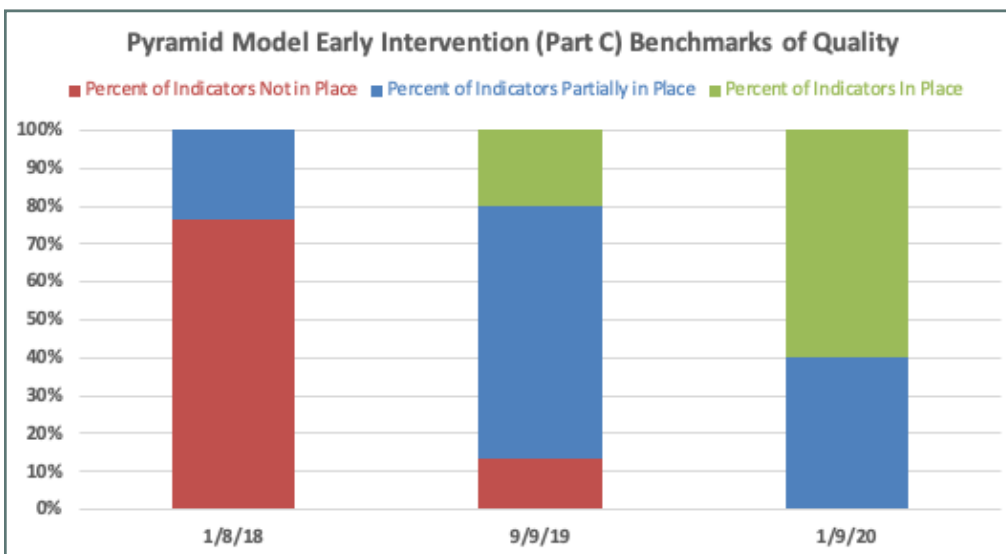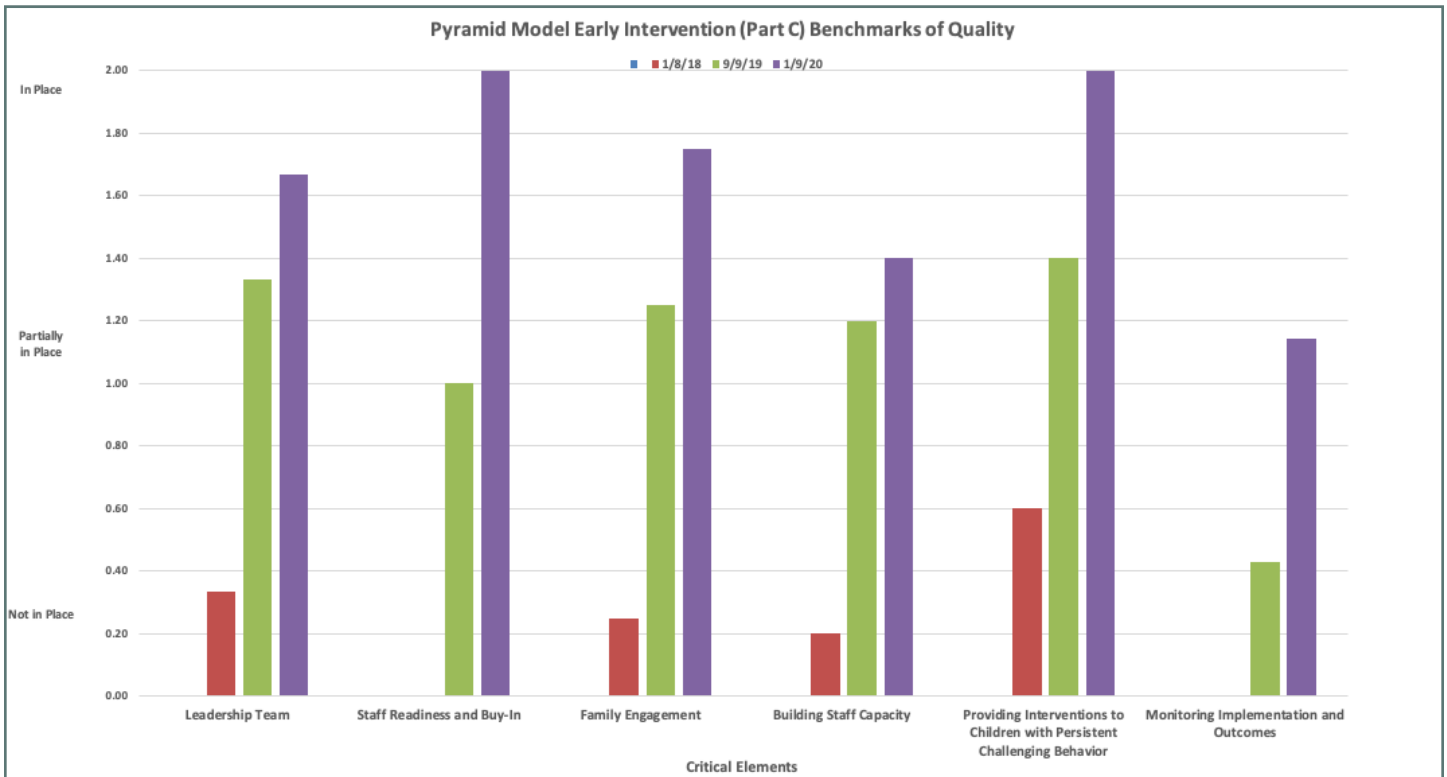
	1/8/18	9/9/19	1/9/20
Percent of Indicators Not in Place	77%	13%	0%
Percent of Indicators Partially in Place	23%	67%	40%
Percent of Indicators In Place	0%	20%	60%

Download the Early Intervention (Part C) Benchmarks of Quality Look-Think-Act discussion guide to review the early intervention BoQ data summaries.

https://challengingbehavior.cbcs.usf.
edu/docs/LTA_EIBoQ_PartC.pdf

Teaching Pyramid Observation Tool (TPOT™) for Preschool Classrooms

The Teaching Pyramid Observation Tool (TPOT™) for Preschool Classrooms assesses the implementation of the Pyramid Model in preschool classrooms. The TPOT is scored based on an observation of at least two hours and an interview with the teacher following the observation. Observations should be conducted during structured, large-group and unstructured child-directed time. Teams submit a TPOT for each classroom at the beginning and end of the school year. The TPOT scoring spreadsheet results in a graphic display for individual teacher scores and a summary of scores across teachers (up to 20 teachers) and provides users with the ability to analyze change in each key practice indicator. A sample of the graphic display of data for one teacher on the key practice items is provided below. In addition, we also provide a link to the Look-Think-Act discussion guide that might be used by the Leadership Team as they examine data from the TPOT.

Did you know?

In addition to graphic displays for individual teachers and summary scores across teachers, the NCPMI TPOT v2.0 Scoring Spreadsheet also provides:

► Customizations (group teachers by cohort and/or program type)

► A summary table of all TPOT scores for all teachers to easily view teachers at or near fidelity

► An item by item review tab where users can look at each item for each indicator to note which items teachers are more frequently scoring "no"

► The ability to use multiple filters to view data in each tab

► The percent of red flags

Sample TPOT Data

Two graphs of the percentage of indicators observed for each TPOT item provide examples of the averages for one teacher and the average across eight teachers. The teacher's graph, below, shows that they made progress on indicators related to nine practice items and implemented at 80% or above on six items. Analysis and action planning would concentrate on the practices within the three items that declined (i.e., transitions, providing directions, and collaborative teaming), the two additional items averaging below 60%, and any red flags.

Graph of Single Teacher

Percentage of Indicators Observed for Each TPOT Item
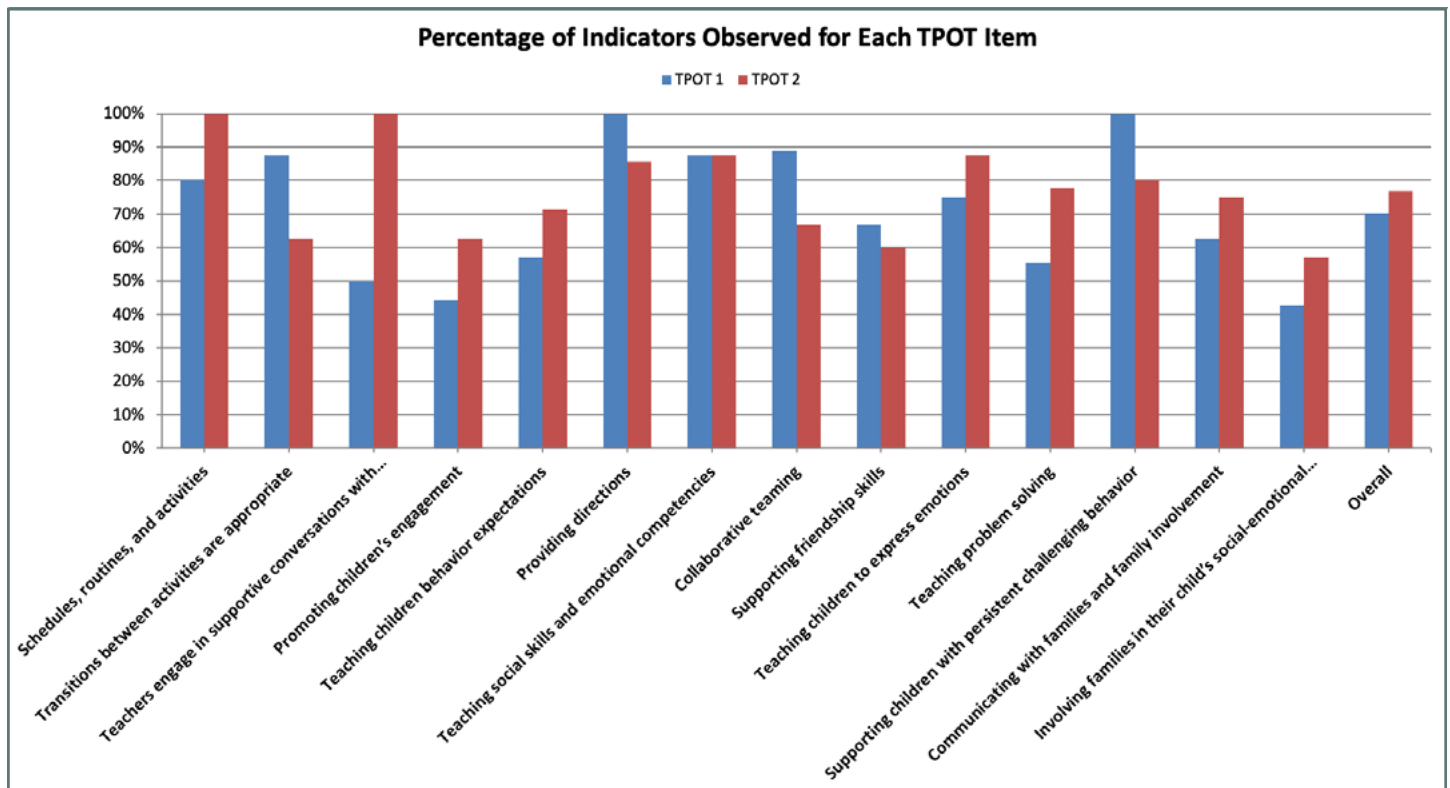
The graph summarizing information for eight teachers, below, shows that on average across teachers all practices are implemented at 80% or better. The Look-Think-Act process would focus on items that declined (i.e., supporting children with challenging behavior, schedules, and providing directions), any red flags, and individual teachers implementing below 80%. When practices are implemented below 80% across teachers, program-wide actions may include additional high-quality training events focused on the practice and delivery of completed coaching cycles.

Graph of Multiple Teachers
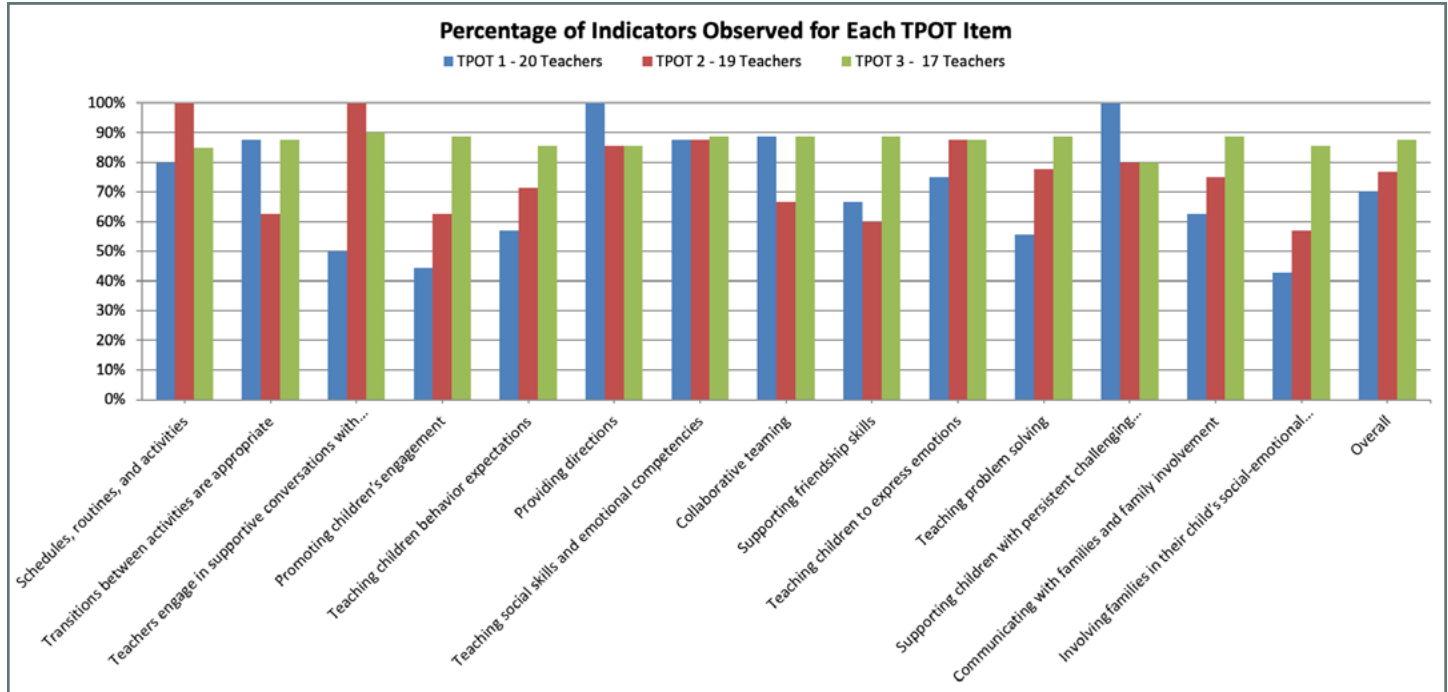
Percentage of Indicators Observed for Each TPOT Item

Teaching Pyramid Infant-Toddler Observation Scale (TPITOS™) for Infant-Toddler Classrooms

The Teaching Pyramid Infant-Toddler Observation Scale (TPITOS™) assesses the fidelity of teacher implementation of practices associated with the Pyramid Model in infant and toddler classrooms. TPITOS scoring is based on an observation with one teacher over at least two hours, and a brief interview following the observations. Observers record the use of practices within at least three of four types of routines: free play, structured group activities, care routines, and outdoor activities. TPITOS observations are generally conducted two or three times over the course of one year. Following the observation and interview, observers enter scores into the TPITOS scoring spreadsheet, which provides users with graphs depicting individual teacher practices across multiple observations over time, as well as graphs for teaching teams. Users can select different combinations of observation time points, or "waves" and different combinations of teachers to create individualized graphs that can serve the dual purpose of looking at one or more teachers, at one or more points in time. Coaches and teachers use TPITOS data to identify strengths and needs, and develop professional goals and action plans. These graphs can be used to analyze change in TPITOS item scores, overall TPITOS scores, and Red Flags over time. A difference from the TPOT™ is that red flags are indicted for both the teacher and classroom as noted in the graph below. The graphs can also be used at the program level to inform classroom- or program-wide professional development activities. TPITOS data may be used to show growth over time when coaches and teachers are actively engaged in coaching aimed at improving implementation fidelity of the Pyramid Model.

Download the TPOT/ TPITOS Look-Think-Act discussion guide to review the data summaries for TPOT and/or TPITOS.

https://challengingbehavior.cbcs. usf.edu/docs/LTA_TPOT.pdf

Sample TPITOS Data

A graphic display for an individual teacher shows three completions of the TPITOS and demonstrates progress in indicators related to thirteen practice items. However, only six items are at or above 80% of practice indicators. Using the Look-Think-Act process for this teacher would focus analysis and action planning on the items with the lowest scores (e.g., responsive to children's expression of emotions and promotes positive peer interactions). The next two graphs show differences among three teachers at the first implementation of the TPITOS and their red flags. The action plans for these teachers could be very different although red flags should be addressed immediately for all three. In addition, the item of responsiveness to expressions of emotions, which has an average of around 30% of practices for all teachers, could benefit from a program-wide goal that includes additional training, new or more materials, and a coaching focus.

Graph of Single Teacher
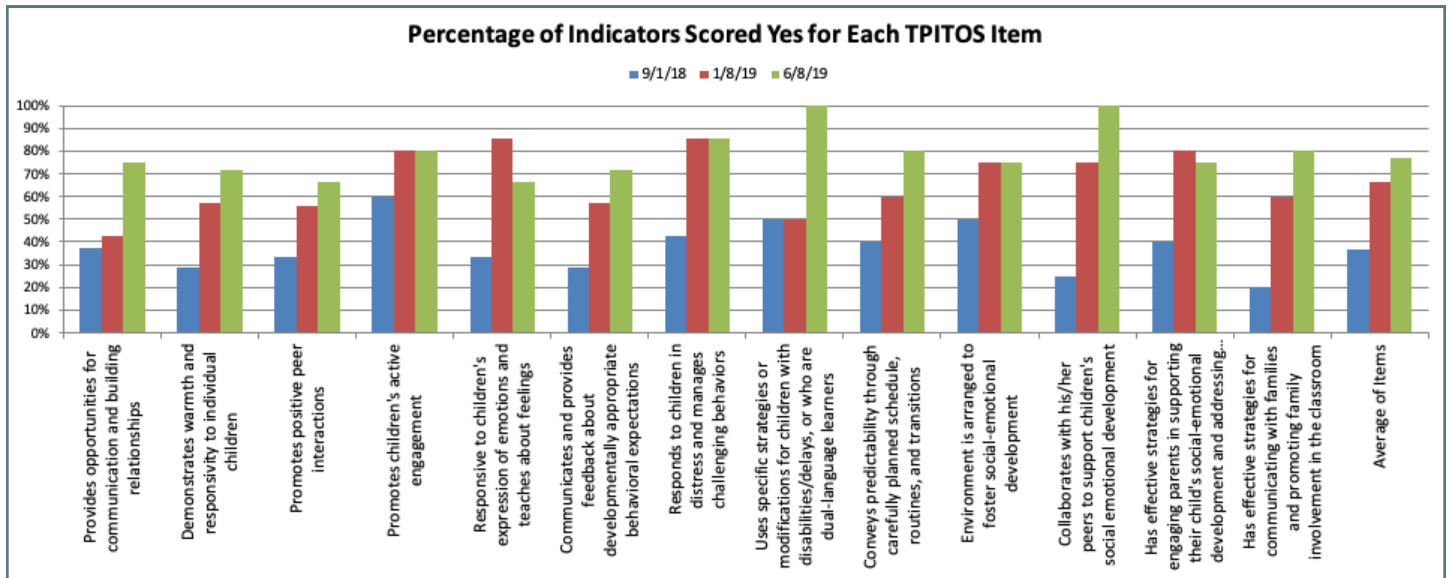
Graph of Multiple Teachers
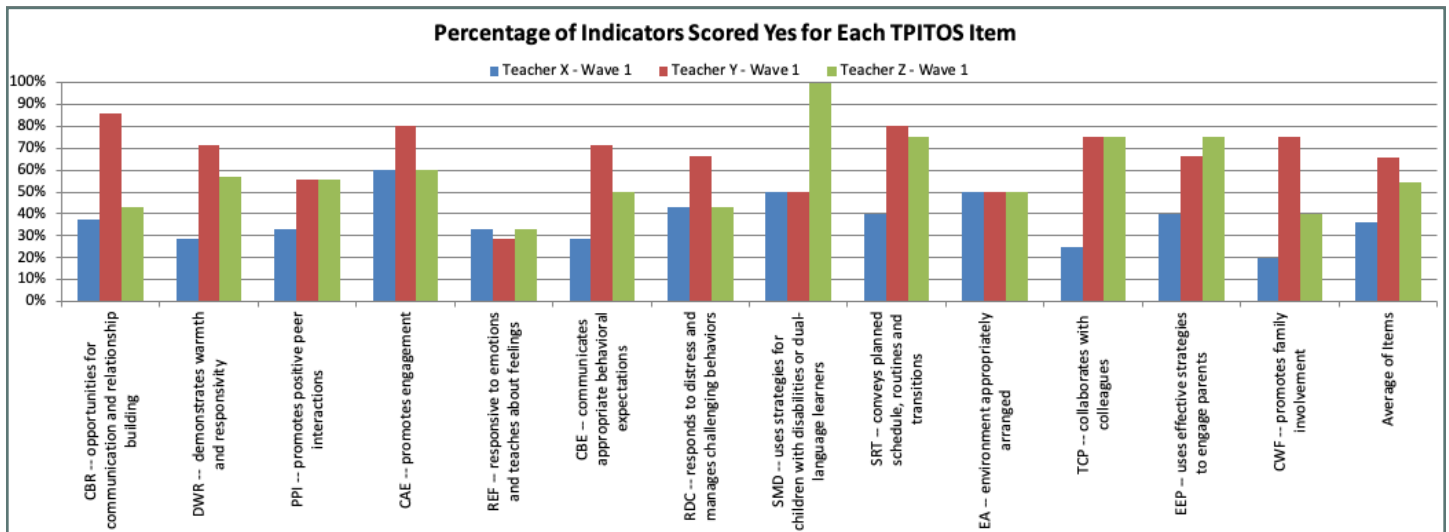
Graph of Red Flags for Multiple Teachers
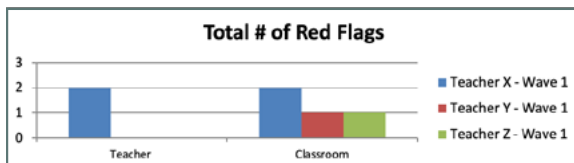
Practitioner Coaching Log
(classroom and early intervention practitioners)

Coaching log data provide a summary of the number and duration of coaching contacts that were provided to practitioners and a description of the professional development strategies used during coaching cycles. NCPMI offers a practitioner coaching log designed for coaching classroom teachers and a log for coaching early interventionists. The scoring spreadsheet allows for a summary of the frequency and duration of coaching cycles by examining the number of completed cycles (observation and debrief occur within a cycle), the average duration of sessions, and the number of action plan goals written and completed. Practitioner coaches can use the summary of coaching data to examine what parts of the coaching cycle were provided to each practitioner, analyze their use of coaching strategies, and see practitioner progress in achieving action plan goals. In addition, the leadership team can aggregate these data across program coaches to provide a view of the total coaching effort across classrooms or early interventionists within the program.

On the following pages, we provide data displays that can guide coaches and leadership teams in considering the coaching supports that are provided to individual practitioners and their progress and the program summary data that provides leadership teams with data across all coaches in the program.

Sample Coaching Log Data

This comparison between classroom coaching for two teachers shows differences in the number of attempted coaching cycles, the percent of completed coaching cycles, and the average duration the coach spends with each teacher during observation and debriefing.

Teacher ID	# of Attempted Cycles	# of Completed Cycles	% Cycles Completed	Total Duration Across Focused Observations	Average Duration Across Focused Observations	Total Debriefing Duration	Average Debriefing Duration
T1	10	9	90%	320	32.0	270	27.0
T2	8	7	88%	160	22.9	110	15.7

Action Planning

■ Total # of Action Plan Goals Written   ■ Total # of Action Plan Goals Completed

Percent of Action Plan Goals Completed

■ Total	T1	T2
	75%	57%
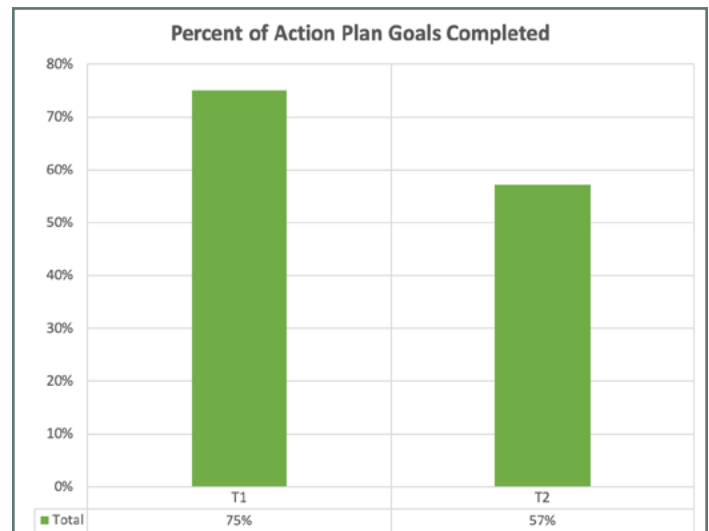
Differences are also noted in the number and variety of coaching strategies used during both observation and debriefing. Teacher 2 has spent less time being coached, has benefited from fewer coaching strategies, and has completed fewer action plan goals. The Look-Think-Act process would focus on the reasons coaching cycles were not completed for both teachers. Further questioning and analysis would also ensure that the coach and teacher had enough time allocated to participate in coaching, that teachers were clearly prepared to accept coaching, and that the collaborative partnership was strong.

Observation Strategies Used Across All Coaching Cycles by Teacher ID

Debriefing Strategies Used Across All Coaching Cycles by Teacher ID
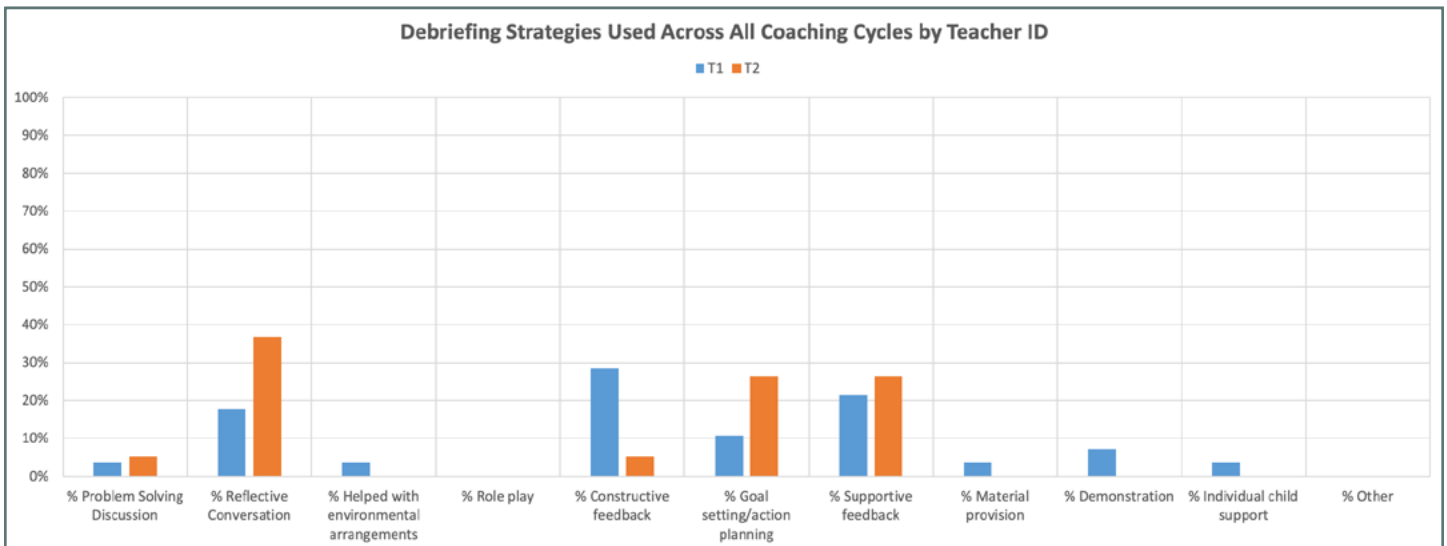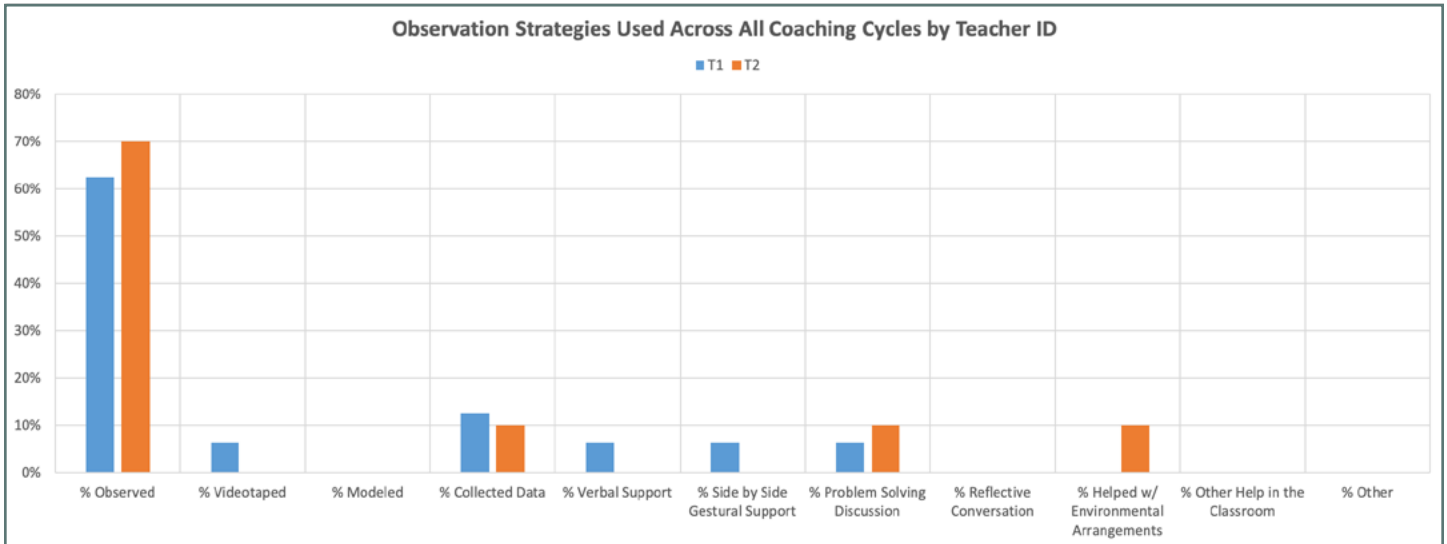
Download the Coaching Classroom Teachers Look-Think-Act discussion guide to review the classroom teacher coaching data summaries.

https://challengingbehavior.cbcs.usf.edu/docs/LTA_CoachingLog.pdf

Download the Coaching Early Interventionists Look-Think-Act discussion guide to review the early intervention coaching data summaries.

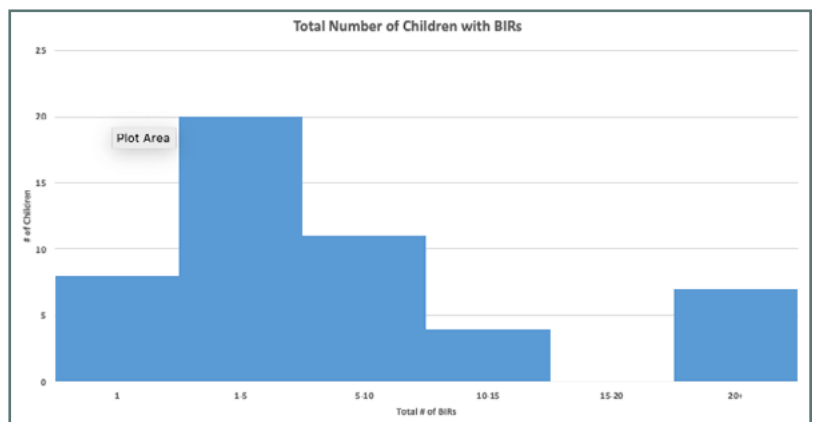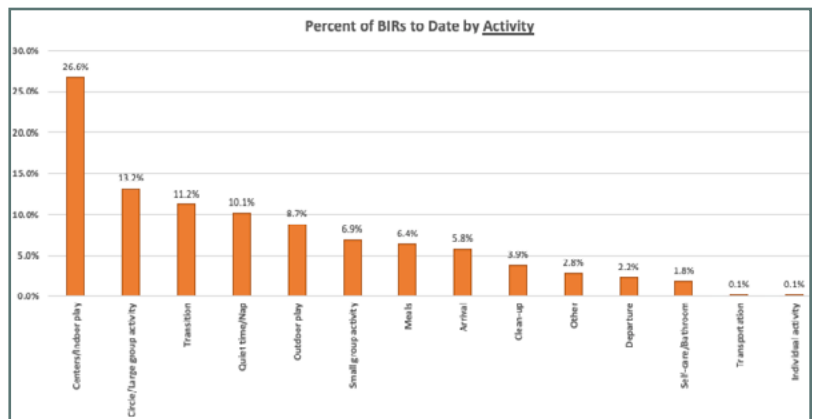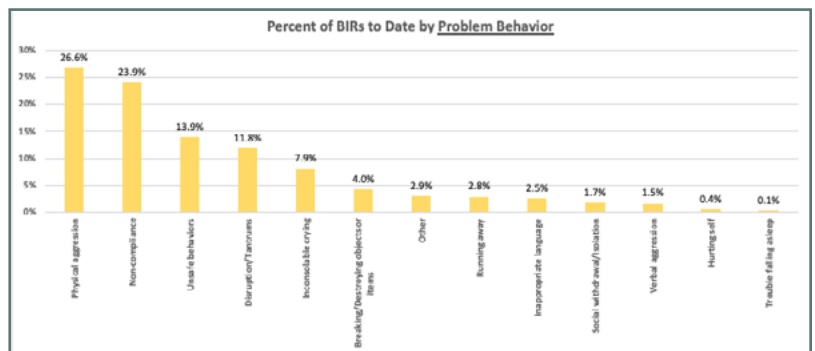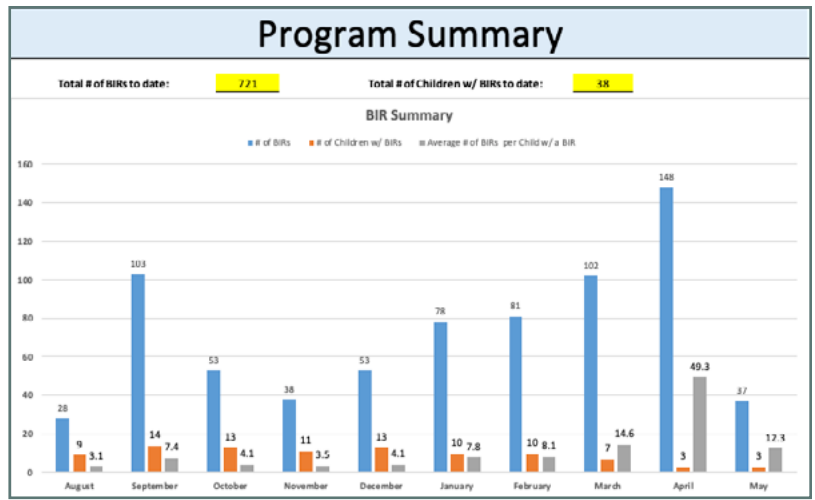https://challengingbehavior.cbcs.usf.edu/docs/LTA_EICoaching.pdf

Behavior Incident Report System

The Behavior Incident Report System (BIRS) package includes a PDF form for recording a single incident of concern, a document with definitions of all items on the form, online training, an Excel spreadsheet to input BIRs, and the *Behavior Incident Report System (BIRS) Data-Based Decision-Making Guide.* Teachers within programs collect data on behavior incidents that are not developmentally normative or are a cause of concern to the teacher. These data are summarized using an Excel spreadsheet.
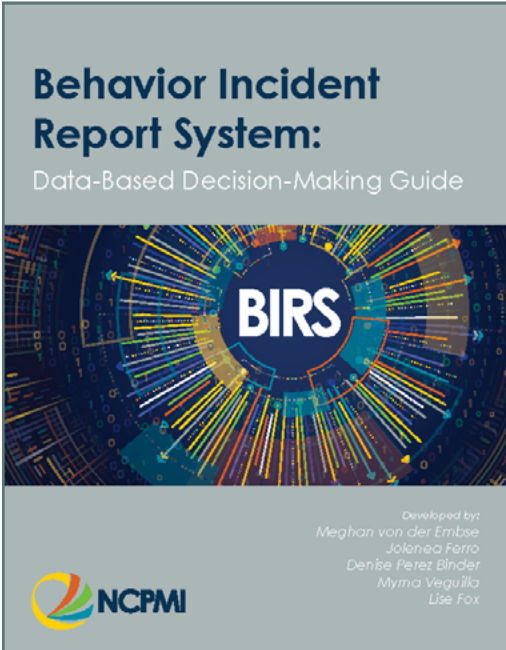
The spreadsheet provides data summaries that are used by the program to understand the frequency and nature of behavior incidents in their program. Graphs display the frequency of incidents by child, classroom, activities, type of behavior, teacher perception of motivation of behavior, and the strategies commonly used in response to behavior challenges including data on the use of suspension and expulsion. In addition to the frequency of incidents, the BIRS can also alert (i.e., equity alert) the user to possible disproportionality in behavior incidents or the use of exclusionary discipline. Metrics for analyzing disproportionality are reported in the workbook with accompanying statements to help guide the user to understanding the metrics.

Leadership Teams should use the *Behavior Incident Report System Data-Based Decision-Making Guide* each month to examine and analyze behavior incidents at the program, classroom, and individual child level using the Look-Think-Act framework.

Behavior Incident Report System: Data-Based Decision-Making Guide

BIRS

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Myrna Veguilla
Lise Fox

NCPMI

Using Data: Practitioners and Coaches

The data that are collected related to Pyramid Model implementation and intervention includes tools that will be relevant for coaches and practitioners to use in the provision of Pyramid Model practices. Coaches will use data on Pyramid practice implementation (collected by the TPOT™, TPITOS™, or EIPPFI) and data that are collected in observation of the practitioner to inform their coaching process. For example, coaches can use data on practice implementation to:

▶ Identify coaching goals;

▶ Understand practitioner strengths and coaching needs; and

▶ Track practitioner implementation progress.

In addition, coaches might track their coaching support activities (e.g., duration of session, frequency of sessions, session activities, strategies used) to provide data that summarizes the coaching provided to a practitioner. These data can be examined along with teacher implementation data to make decisions about which teachers might need additional or different modes of support.

Other Pyramid Model data tools that can inform coaching include the Behavior Incident Report System and child progress monitoring forms. These data will provide coaches with information about the nature of behavior incidents that are occurring within the classroom that can be used to help teachers modify their practices, understand child behavior challenges, or provide effective intervention. Coaches will also use the data from child progress monitoring forms to guide teachers in evaluating the effectiveness of individual child interventions.

Practitioners will use their implementation fidelity data (e.g., TPOT™, TPITOS™, or EIPPFI) in the development of professional development goals, to identify their strengths, and to identify areas for improvement. These data can also be used to show growth when practitioners are actively engaged in efforts to increase implementation fidelity of Pyramid Model practices.

In addition, practitioners will be using child data to understand the instructional needs of individual children and child progress in response to intervention. Practitioners might use curriculum-based assessment to monitor child progress on learning goals, use informal data collection tools to gather information on child responses, or might use progress monitoring

tools to track child outcomes. In addition, there are numerous child standardized assessments that provide information on children's skills and developmental status.

The ASQ:SE or a social emotional screening tool will provide important information for a practitioner. These data identify infants and young children whose social or emotional development requires further evaluation to determine if referral for intervention services is necessary.

Practitioners will also use the information gained from the use of the Behavior Incident Report (BIR) that is used to collect information related to behavior incidents that are of concern. Data from this tool can be used to identify which children have incidents of concern and the factors that relate to those incidents. BIR data can also be used to track incidents over time and show child progress when supports are in place. Finally, practitioners will use the child progress-monitoring tool that is designed for children who have a behavior support plan to ensure that the plan is making a difference in the child's acquisition of a replacement skill and reduction of challenging behavior.

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