May 2023

Teacher Practices Instrument

Measurement Manual



QTurn's **Teacher Practices Instrument (TPI)** is an observational rating measure designed to assess the quality of teacher (or staff) *practices* in school classrooms or out-of-school time (OST) programs, build a quality-focused organizational culture, develop improvement goals, identify staff training needs, and provide information about how specific aspects of instructional quality relate to specific aspects of children's socioemotional skill growth. This measurement tool is applicable to all staff delivering school or OST instruction or other learning experiences and is focused on staff practices that are warm, responsive, scaffolded, and encouraging. Each of the 24 items on the TPI describes a staff practice used to promote the socio-emotional skill growth of children. This manual includes the following sections to support successful implementation and understanding of the TPI:

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Introduction

QTurn's Quality-Outcomes Design and Measure (Q-ODM) toolbox includes a comprehensive suite of evidence-informed measures designed to assess the quality and impact of out-of-school time (OST) programs. This manual provides information about an observational rating instrument designed to assess teachers' and OST staff's instructional practice quality at the point of service. We also provide some technical information about the measure and general guidance about how to administer, score, and interpret it.

The Teacher Practices Instrument (TPI) was developed by the researchers at QTurn, in collaboration with expert practitioners and numerous OST organizations by creating observational rating items focused on the warmth, responsivity, scaffolding, and encouragement of teachers and OST staff where interacting with children and youth at the point of service. Each item was refined by iterating variations in wording and examples with experienced teachers and OST staff.

The TPI is generally applicable to, and can be used for, any and all types of school classrooms and OST program offerings. The TPI can also be used with children and youth classified as having an individualized education program (IEP) or similar designation in the same way you would use it for anyone else. We generally recommend using the TPI as the primary measure of teacher's and OST staff's instructional practice quality for impact studies because we believe that it is accurately reflects the kinds of practices most likely to influence children's and youth's socio-emotional skill growth.

Please keep in mind that the TPI does *not* provide a clinical assessment of classroom teachers or OST staff. It is intended only for *lower-stakes* planning, improvement, and program evaluation purposes (e.g., where low scores signal areas of focus and support for teachers and staff but not failure, sanctions, or other disciplinary action).

The following sections include:

- The theory of change underpinning the measure.
- A technical guide to the measure covering
 - o what it is,
 - how it was developed,
 - o how and when to use it, and
 - how to administer it.



Theory of Change

The Teacher Practices Instrument (TPI) is based on a theory of change (Figure 1) for how the behavior of schoolteachers and OST staff at the point of service promote the development and growth of children's and youth's socio-emotional skills (Peck & Smith, 2020). The theory of change is focused on the point of service because that is where adults and youth directly interact with each other, so that is where we expect to see the kinds of staff practice and youth engagement that have the most direct impact on the behavioral expression of socio-emotional skills and socio-emotional skill growth. It also includes regional, community, and organizational levels because the quality of staff practice at the point of service depends a lot on the kinds of support staff receive from people working at these 'higher' levels (e.g., professional development opportunities, manageable numbers of youth allotted to each classroom or program offering, sufficient resources and staff to help manage the allotted number of youth, etc.). The theory of change also includes near and far transfer elements (e.g., how youth behave at home and the kind of progress they make on their educational or occupational journeys) because that is where we expect to see the ultimate benefits of socio-emotional skill growth.



Figure 1: Theory of Change for Multilevel Cascades of Causes and Effects.

The theory of change indicates that high-quality staff practice at the point of service (e.g., 'meeting youth where they are at') promotes youth mental engagement at the point of service. Youth mental engagement promotes both the optimal behavioral expression of current skills and, through multiple interactions over time (e.g., feedback and mastery experiences), socio-emotional skill growth. In these terms, socio-emotional learning (SEL) is the process through which children and youth develop essential life skills such as empathy, regulating emotions, responsibility, and teamwork. Socio-emotional skills are the relatively-enduring mental and behavioral results of these learning processes. These skills play a central role in youth's ability to do well in school, make successful transitions to adulthood, and achieve positive life outcomes, including educational attainment, employment, and good health.

The TPI is focused on staff practice at the point of service and, from the staff perspective, 'meeting youth where they are at' generally refers to adult *sensitivity* and *coregulation*, which can be viewed as the primary *active ingredients* of context effects on children's socio-emotional skill growth (Shonkoff & Phillips, 2000). Consequently, interventions that increase adult sensitivity to children's emotional skills and improve the responsiveness (e.g., timely, appropriate) of adults' coregulation should promote the growth of children's socio-emotional skills. As described below, we expand on the concepts of sensitivity and coregulation by reference to the concepts of *warmth*, *responsivity*, *scaffolding*, and *encouragement*.



Teacher Practices Instrument (TPI)

About the TPI

The Teacher Practices Instrument (TPI)¹ is an observational rating instrument used to assess the quality of staff practices at the point of service in four domains of practice quality (i.e., Warmth, Responsivity, Scaffolding, and Encouragement). These four domains represent specific aspects of two key features of developmentally-appropriate caregiving behavior: sensitivity and coregulation. In the science on parenting, the term *sensitivity* is used where referring to caregivers' mental skills and the term *coregulation* is used where referring to caregivers' responsive behavioral skills (cf. Collins et al., 2011; MacDonald, 1992; Meins, 2013). Caregivers with the most sensitive (e.g., accurate) mental models about children and youth² are most likely to provide the most responsive (e.g., timely and appropriate) coregulation supports to children. This suggests that teachers and staff who understand what's going on with children (e.g., who are *trauma-informed and attachment aware*) will be in the best position to help children cultivate positive regulation and emotion skills and, for children experiencing negative regulation and emotional states, help them recover back into the present moment and learning task at hand – often before they are further triggered or excluded from the classroom or OST program activities.

Similar to the distinction between children's mental and behavioral skills in QTurn's *neuroperson* model (Peck & Smith, 2020), the distinction between staff's sensitivity (i.e., mental skills) and coregulation (i.e., behavioral skills) is entirely aligned with "the three-term 'standard model'" (Bornstein et al., 2018, p. 399) of parenting practices, in which *parent mental skills cause parent behavioral skills that cause children's mental and behavioral skill* growth. In other words, for growing socio-emotional skills, high-quality staff practices are very similar to high-quality parenting practices; that is, staff mental skills (sensitivity) cause staff behavioral skills (coregulation) that, in turn, cause children's mental engagement at the point of service that causes children's mental (schemas, beliefs, awareness) and behavioral skill growth. Consequently, drawing from the parenting literature, the items on the TPI describe schoolteachers' and OST staff's sensitivity and coregulation skills in terms of the following four aspects of caregiver behavior: *warmth*, *responsiveness*, *scaffolding*, and *encouragement*.

- Warmth refers to warm behavior, defined in terms of the emotional tone communicated to
 others, through both verbal (e.g., kind words of welcome at program entry) and nonverbal (e.g.,
 tone of voice) behavior. The low end of the warmth dimension is cold behavior, which includes
 both the absence of warm feelings and behavior (e.g., no or few validating words and gestures)
 and the presence of cold feelings and behavior (e.g., any hostile, hurtful, or rejecting words and
 gestures).
- Responsiveness refers to immediate verbal and nonverbal behavioral responses to children's immediate verbal and nonverbal behavior (e.g., speech, body language, expression of emotion). In settings with many students per staff, immediate is defined as being in the 5 to 10 second range. Responsive staff behavior occurs when they are attuned to children's engagement with the situation and use their behavior to help coregulate children's generally positive emotional arousal (in non-stressful situations) and negative emotional arousal (in stressful situations).

² Hereafter, we use the term *children* where referring to both school-aged children and adolescents.



¹ The TPI is also known as the Staff Practices Instrument (SPI); for more information, see: https://www.youthimpact.uk/

- Scaffolding refers to verbal and nonverbal behavior that is calibrated to a particular child's skill level, or zone of proximal development (ZPD; Vygotsky, 1978). Properly scaffolded staff behavior 'meets children where they are at' because it conveys information that is easily understood by children, either implicitly by non-conscious processes (e.g., modeling) or explicitly by conscious processes (e.g., verbal instruction). The scaffolding process has been described mainly in terms of the development of subject matter knowledge, but it is increasingly apparent that it also applies equally to all forms of skill growth, including socio-emotional skill growth.
- Encouragement refers to verbal and nonverbal staff behavior that acknowledges, validates, and motivates children's thoughts, feelings, and behavior. Encouragement promotes children's mental and behavioral skill growth and can be viewed as a special form of scaffolding. The most basic kind of encouraging behavior generally takes the form of words, sounds, and actions that are intended to help energize children to continue moving successfully along a given task pathway, as in cheering them on to initiate, sustain, or further their progress. The TPI focuses especially on staff behavior that encourages using awareness during reflection (e.g., problem solving) and mindfulness (e.g., noticing feelings and sensations in the present moment).

According to our theory of change, the highest-quality staff practices are generated by integrating knowledge about *warmth*, *responsiveness*, *scaffolding*, and *encouragement* into a single, coherent behavioral response that both meets children where they're at and challenges them to extend their budding socio-emotional skills. Despite the fact that staff behavior can be viewed as an integrated combination of each of the four dimensions described here, each of the TPI items is focused especially on one of the four dimensions. After generating the scores for each of these dimensions, they can be combined (e.g., via profile analysis) to reveal each staff's unique instructional quality skill set.

The TPI was developed with extensive practitioner input and academic research about the effects of parenting behavior on children's development, combined with practical experiences that come from collecting lots of observational data. The intention was to create an observational rating instrument that (a) is easier to use than alternatives for school day classrooms and OST program offerings, (b) is more clearly focused on aspects of staff behavior that embody the concept of high-quality staff practices at the point of service, or instructional quality, specifically for vulnerable populations (i.e., where there is a high prevalence of potentially traumatic experiences), (c) is entirely consistent with QTurn's neuroperson framework (e.g., mental skills are completely different than, and cause, behavioral skills), and (d) fulfills the specific purpose of specifying the prevalence and type of children's socio-emotional skill growth at different levels of instructional quality.

Although the TPI items are the result of decades of research by the QTurn team, to date, only three rounds of data collection have been completed using the instrument. During each round, data collectors were successful achieving over 80% perfect agreement across all items on twelve paired observations. Because the TPI's items and constructs are individually, and differently, configured to reflect the reality of instructional practice in OST settings (e.g., many items are *formative* not *reflective* indicators of their respective scale scores), traditional psychometric assumptions and techniques may not be appropriate for evaluation of the instrument. We recommend that users focus on the face validity of the items in evaluating the applicability of the tool to their continuous improvement or evaluation goals. Appropriate and final validation of the item and scale scores produced using the TPI are pending the production of more extensive datasets (e.g., including socio-emotional skill growth data) that can be used to establish inter-rater reliability, consequential validity³, and criterion validity.

³ Consequential validity refers to "the value implications of score interpretation as a basis for action as well as the actual and potential consequences of test use, especially in regard to sources of invalidity related to issues of bias, fairness, and distributive justice" (Messick, 1995, 745).



After analyzing the data, we generally provide reports to each organization that show the four primary TPI scales (i.e., Warmth, Responsiveness, Scaffolding, and Encouragement) as a set of profiles (e.g., Higher-, Moderate-, and Lower-Quality practice profiles) that characterize the instructional quality delivered at the point of service. For network-level reports, we also include basic descriptive information (e.g., the percentage of teachers in each profile). If the TPI is used more than once (e.g., at baseline and program end), then similar aggregate information can be used to assess network-level changes in instructional quality (e.g., by comparing the percent of teachers in a high-quality TPI profile at baseline to the percentage of teachers in a high-quality TPI profile at follow-up). Finding evidence of higher-quality instructional practice profiles using TPI scores supports conclusions like (a) program staff are using high-quality instructional practices at the point of service and (b) the reason children are improving their socio-emotional skills is because program staff are using high-quality instructional practices at the point of service.

How and When to Use

The TPI should be used to assess the quality of teachers' or OST program staff's practices, or instructional quality, at the point of service (e.g., classrooms or program offerings). It can be used by trained external raters, other schoolteachers, or other OST program staff as an observational rating instrument. The TPI instructional observation process can be done at any time during the school year or course of programing. For example, it can be completed once, in the middle of a program period, to get a general idea about how well staff are implementing best practices. It can also be completed twice: For example, once at the beginning of a program period, to inform improvement goals and training priorities, and once at the end of a program period to assess improvements in the quality of instructional practices. It can also be completed multiple times across the program period for both of the two previously mentioned purposes as well as to gain detailed information about how and when staff practices are improving (e.g., to assess the value of a mid-program professional development training session). The timing of the TPI process should be determined by the goals of the organization (e.g., continuous quality improvement, program evaluation, or both).

The TPI can be used to assess the quality of staff instructional practices with children ages 5 and up. It works well for children ages 5 to 9 who are in the process of developing their basic regulation skills and also for older children and adolescents (ages 10 and older) who are in the process of developing their full range of socio-emotional skills, including the advanced regulation skills associated with focusing awareness on complex emotions and abstract task or identity content. The TPI scoring process for any given staff person should take about 45 minutes to complete, but spending more time (e.g., in small groups of practitioners using a self-assessment process) can yield deeper insights into current practices and the steps necessary to develop and refine future practices.



Administration and Scoring

TPI Items

The TPI measures 24 teacher practices that are warm, responsive, scaffolded, and encouraging. There are 3 response options for each item, where "1" is the lowest score, "3" is the middle score, and "5" is the highest score. The meanings of the 1, 3, and 5 response scale options are different for every TPI item. The items and their highest (i.e., "5") response scale options are described in the table below.

I. Warmth

1 Attune at Entry; 5 =

- Staff tone, body language, and words convey a *five-part greeting* to each (> 90%) Child during their entry into the program space:
 - o *Proximity* (meet at door, stand close to sit with), *smiling facial expression*, warm tone used with a positive *verbal greeting*, *eye contact*, and guidance about what to do next (can be to whole group at end of entry).
 - For younger children (or any upset Child), the greeting may include consoling or reassuring physical contact as appropriate (e.g., Children give staff hugs, 5-6 year olds sit on lap).
- [Consider evidence for this item only from behavior observed during the entire entry period before the first activity.]

2 | Acknowledge and Adjust; 5 =

- Staff always acknowledge and validate children's tone, body language, and words both in the moment (e.g., high fiving for success; sitting and talking quietly with children; staff moves toward social conflict) and in the structure of activities for the session.
 - Staff are always in close proximity to Children during the session (e.g., sit at all tables with Children during art activities).
 - Staff allow children to move their bodies around the space that is available and appropriate (e.g., children are allowed to move around the room during entry; children are allowed to move around their desks during activities)
 - Staff adjust activity plans based on emotional and behavioral needs of students (e.g., adjust plans based on children's energy and focus).
 - Staff encourage creativity to reduce children's self-judgement about activity content (e.g., you can make it anything you want, and anything you make will be awesome!) and highlight choices to maximize feelings of control over activity content (e.g., there are several different games that you can choose from).
 - o For younger children, staff provide consoling or reassuring physical contact as appropriate (e.g., staff allow young children to give them hugs or sit on lap for 5-6 year olds).
- [This item includes any observed 5-part greeting practices conveyed after entry is over.]

3 | Adult Containment During Chaos; 5 =

- Staff always use calm tone and body language, especially when interacting with light to moderate chaos.*
 - When using a loud voice is necessary (e.g., when responding to children who exceed the limits in a noisy space),
 adults do not exceed *light reprimand*** and move toward children with positive tone and body language so that voices can be lowered (e.g., not yelling out across a room).
- [Do not score if no light or moderate chaos. This item can share evidence with items 3, 9, & 22.]
- *Light chaos = (a) strong harsh emotion (e.g., anger, hatred, contempt) or euphoric emotion by one or more children; or (b) persistent non-compliance by 1 or more children. *Moderate chaos* = both (a) and (b).
- **Light reprimand = Using tone, body language, and words to express public disapproval with care/concern and without harsh emotion; Moderate reprimand = Using tone, body language, and words to express public verbal disapproval with harsh emotion.

4 | Overall Warmth; 5 =

Considering everything you observed during your site visit:

At all times, staff used positively-framed language and warm tone, facial expression, and body language with all Children.
 (For younger children, body language includes appropriate physical contact including sitting on laps, holding hands, and providing hugs when requested.)



II. Responsiveness

5| Promote Movement; 5 =

- Staff guide children to move their bodies with intentional vigorous movement for at least 8 minutes (e.g., sport in the gym or field, physical play on a playground or in a hallway, or other types of intentional movement like yoga in classroom or on the lawn, dance on the stage, etc.).
- Staff join children in movement and/or play (e.g., join sport or play, actively referee or lead children in the activity).

6 | Prompt Attention; 5 =

- Three or more times, Staff prompt children to manage their focus:
 - Use group attention-getters during transitions and moments of group disorganization (e.g., hand claps, 54321).
 - Guide children to calm and quiet states during transitions (e.g., waiting till the line is quiet and calm before leaving; let's all take three breaths!).
 - Guide children to calm and quiet states during activities (e.g., soft music, dim lights, sensory/safe space, tactile materials, mats/carpet).

7 | Prompt Accountability; 5 =

- Staff notice and respond within 10 seconds to almost every instance of Children exceeding appropriate norms for behavior or violating community agreements (e.g., staff ask "do we throw garbage on the floor?;" staff ask unfocused students to please make sure they eat; staff remind students to please walk, don't run).
 - o Staff address violent/sexual language, swearing, inappropriate dance moves.
 - o Staff ask Children to participate fully in the program activities.
- At least once, Staff verbally reference posted community agreements set by the Children and Staff (e.g., Staff reference specific agreements; Staff ask Children if they need to review the agreements?).

8 | Restore after Bias; 5 =

- For every instance of verbal conflict, bullying, and/or exclusion/bias (e.g., ability, religion, culture, race/ethnicity, class, gender, appearance, or sexual orientation) staff responds within 10 seconds and guides Children to a restorative state (e.g., apology, conflict resolution steps, discuss perspective adjustment) in that moment.
 - o For children who use "other" comparisons or negative self-talk, resolve by *refute and redirect* to positive (e.g., yes, she is good at math but so are you; look what you've done while we've been working on this).
- [Do not score if bias, social conflict, etc. are Not Observed.]

9 | Provide 1-on-1s; 5 =

- Children having an emotional overflow event (e.g., hyperarousal, hypervigilance, immobility/collapse, grief/anger) are always provided the option of a 1-on-1 with a trusted Staff, without reprimand, in a different room if possible (e.g., hallway or other room).
- During 1-on-1s:
 - o Staff discuss causes and effects, and/or constructive handling, of emotions and behavior.
 - Staff responses help Children focus awareness on the present moment and/or discuss or observe sensations and feelings.
- [Do not score if emotional overflow did Not Occur.]
- Interview: What did you discuss with Child during 1-on-1.

10 | Overall Responsiveness; 5 =

Considering everything you observed during your site visit:

- At all times, Staff respond within 10 seconds to every behavioral event, especially when children are emotionally activated (e.g., excited, upset or worried, fidgeting, acting out, shutdown, can't focus).
- [Cannot score 5 if moderate chaos was observed.]



III. Scaffolding

11 | Explain Steps; 5 =

• Staff break down activities into simpler steps that are explained to all Children, *both* before they begin and during the activity (e.g., steps in sequence written on white board; detail for specific steps are added during sequence).

12 | Provide Models; 5 =

• Staff provide models for all Children, *both* before they begin and during the activity (e.g., examples of the finished product or distinct steps are shared; Staff point out student work; Staff sit and do the activity with Children).

13 | Link to Experience; 5 =

• Staff ask Children to discuss connections between activities and Children's prior experience (e.g., who has made slime before, can you tell us the ingredients; how many of you have a had a powerbar before, were there any veggies in it?). Staff say Do you remember...? or Have you ever...? about prior events in the program or in the Child's past experience.

14 | Link to Categories; 5 =

• Three or more times, Staff link activity content to more general or abstract categories (e.g., Yes! This design is linked to careers in shoe design; Yes, you can be the cook and you can be the server, just like in a restaurant; What property gives us addition? ... it's the Associative law!; What type is this, breakfast food or dinner food?). Staff say, this is a type of that, using classification; or, this is like that, using analogy.

15 | Emotion Vocabulary; 5 =

• At least once, Staff intentionally use and define correct terms and concepts related to emotions, including external behaviors and internal feelings and sensations (e.g., you look joyful today, are you joyful?; patience my friends, patience is our word for the day, do know what the word patience means? Can anyone tell me...?).

16 | Promote Efficacy; 5 =

- Three or more times, Staff:
 - Verbally attribute children's success to their effort, strategy, attention, practice, or persistence (e.g., "It may take some extra practice, but you'll get better at it").
 - Provide children with opportunities to give and receive affirmations and appreciations to self and/or others (e.g., group recitation "I am strong...").
 - Encourage making and learning from mistakes (e.g., okay that's great you did it!, but it's wrong and that's okay, because what did we learn?).

17 | Promote Teamwork; 5 =

- All Children are asked to work toward shared goals (e.g., parallel groupwork at individual seats, organized group games outdoors, small group design of a catapult).
- 1 or more Children are provided with a formal opportunity to share with the whole group (e.g., what did you do this weekend?; student to describe their work to group).

18 | Promote Responsibility; 5 =

- Children have multiple opportunities to be responsible for community tasks (e.g., taking attendance, cleaning dinner tables, assisting with an activity, distributing materials, running errands, etc.) and their own homework or other prior incomplete activities.
- 1 or more Children are provided with a formal opportunity to mentor another child (e.g., older helps younger with math problems) or lead a group activity (e.g., leads group appreciations for the day).

19 Overall Scaffolding; 5 =

Considering everything you observed during your site visit:

• All the time, Staff "meet children where they are at" in all cases because their verbal and nonverbal behavior and the activity content is always adjusted to every child's skill level (e.g., academics, socio-emotional, artistic, culinary, etc.).



IV. Encouragement

20 | Reflect on Content; 5 =

• Three or more times, Staff ask Children to come up with or generate hypotheses, plans, goals, or alternatives as part of activities (e.g., how can the activity be accomplished and how long will it take; there are three field trips coming up, which do you want to get a permission slip completed for?; can you find another way?) and wait for their response. Staff ask Children to evaluate program or activity content (e.g., show thumbs; take a survey).

21 | Reflect on Diversity; 5 =

• Staff ask children to share experiences (e.g., who has been to a theme park, what did you do there?) and values (e.g., what do you like most about your family's holiday) and provide guidance about how to reflect on diversity with tolerance (e.g., there are no wrong or right answers; I want you to listen to what each other have to say and don't be a haters, people are different).

22 | Reflect on Emotion & Behavior; 5 =

• For all: Staff ask youth to discuss causes and effects, and/or constructive handling, of emotions and behavior using either past real experiences or fictional events (e.g., How does fit throwing get you to the things that you want, like gym time?; What happened to this character after her sister died, how did she feel?; let's review the community agreements). Staff say: If you do this, this happens (cause and effect); or, how could we have done that better? (constructive handling).

23 | Reflect on Mind-Body; 5 =

• For all: Staff provide opportunities for all Children to bring the focus of awareness to the present moment (e.g., take a deep breath, feel the weight of this coin in your hand) OR help Children to discuss or observe quietly their internal bodily sensations and feelings.

24 | Reflect on mind & body; 5 =

Considering everything you observed during your site visit:

• All the time, Staff verbal and nonverbal behavior acknowledges, validates, and motivates children's thoughts, feelings, and behavior, AND the activity content contributes encouraging, positive energy to children for the purpose of encouraging children's use of awareness during reflection (e.g., about learning tasks, social contexts, and their own mind-body) and mindfulness (e.g., cultivating non-judgmental self-awareness about their thoughts, feelings, and internal bodily sensations).

Scoring

- 1. There are no TPI items for any scale that require being reverse scored prior to calculating the scale scores.
- 2. The mean of the response values for items in each domain should be calculated to yield each of the four domain scores. For example, the mean of items 1-4 should be calculated to yield a single Warmth scale score for the given teacher. If some item responses are missing (e.g., item 3 may not be scoreable in some cases), scale scores can still be calculated. (We recommend requiring at least two thirds of the items from each domain to create a scale score.) The resulting scale scores should range from 1 to 5.



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