The KPICD Intervention Model: A Framework for Intervention, Training, Implementation & Evaluation

David R. Cross, Ph.D., Rees-Jones Director
Karyn Purvis Institute of Child Development
Texas Christian University

June 8, 2019

The overarching purpose of the KPICD is to leverage our knowledge, skill, and effort to impact the lives of children "who come from hard places." The KPICD could be said to have five "impact engines:"

- The KPICD website, blog, and facebook page (see child.tcu.edu);

- the Child Development major and minor, and the MS in Developmental Trauma;

- publications produced by the KPICD Research & Evaluation Team;

- the KPICD Intervention Model, described in this document;

- the network of KPICD partners, who amplify the efforts of KPICD staff to impact the lives of children around the world.

The KPICD Intervention Model is a framework for organizing and focussing work done at the KPICD in order to achieve the KPICD's vison and mission (see Figure 1). This document has six sections:

1. Trust-Based Relational Intervention (see Figure 2);

2. TBRI Training and Resources

3. TBRI Training Principles;

4. Three Phases of TBRI Implementation (see Figure 5);

5. TBRI Implementation Principles;
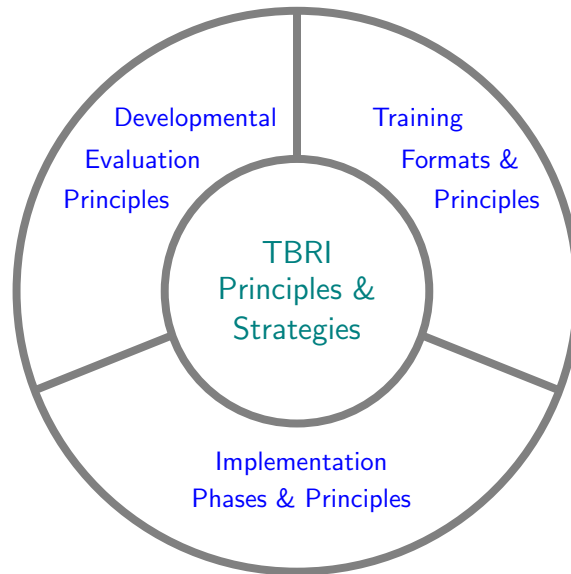
6. Developmental Evaluation (see Figure 6).

Figure 1: The KPICD Intervention Model has four components, with the TBRI Principles and Strategies forming the core of the model. TBRI is brought to life by three sets of activities: Training, Implementation, and Evaluation. These activities constitute a unified framework for creating sustainable impact while working with our partners toward shared goals and purposes.

Trust-Based Relational Intervention

At the heart of the KPICD's effort is its intervention model, Trust-Based Relational Intervention® (TBRI® — see Figure 2). TBRI is whole-child, attachment-based, trauma-informed, science-based, multi-systemic, culturally-grounded. We say TBRI is *whole-child* because the TBRI principles and strategies address social, behavioral, emotional, physiological, cognitive, and ecological aspects of children's development and wellbeing (see Diamond, 2010; Kline, 2008). We say TBRI is *attachment-based* because it is grounded in attachment theory and research, as can be seen in the TBRI Connecting Principles, which emphasize mindful engagement by adults as a means of building trust and resilience among the children and youth we serve (see Cassidy and Shaver, 2016; Siegel, 2012). We say TBRI is *trauma-informed* because it is grounded in the neuroscience of relational trauma, as summarized, for instance, in Howard Bath's three pillars of traumawise care: felt-safety, connection, and self-regulation (Bath, 2008, 2015; Bath and Seita, 2018). We say TBRI is *science-based* because all of the TBRI principles and strategies are based in the developmental neurosciences (Purvis et al., 2013), and there is a growing database documenting the impact of TBRI in various relational and therapeutic settings (Purvis and Cross, 2006; Purvis

Whole-Child

Attachment-Based

Trauma-Informed

Science-Based

et al., 2007a, 2012, 2015; Razuri et al., 2016). We say that TBRI is *multi-systemic* because TBRI is being successfully implemented in a wide variety of professional and caregiving contexts, including residential treatment facilities, adoptive and foster homes, juvenile justice settings, family- and youth-related courts, advocacy programs, behavioral health programs, and educational settings — this is a distinguishing feature of TBRI, that enables interventionists to address collaborative, whole-system change (see Brand et al., 2017; Dooris et al., 2007; Edwards, 2009). In addition to being whole-child, attachment-based, trauma-informed, science-based, and multi-systemic, we have discovered that TBRI is *culturally-grounded,* because TBRI is congruent with the deep-rooted wisdom of indigenous cultures, emphasizing cultural values such as the centrality of relationships, the importance of respect, a holistic view of children and adults, the necessity of experience, and a central role for ceremony, ritual, and story (see Mehl-Madrona, 1997, 2003, 2005).

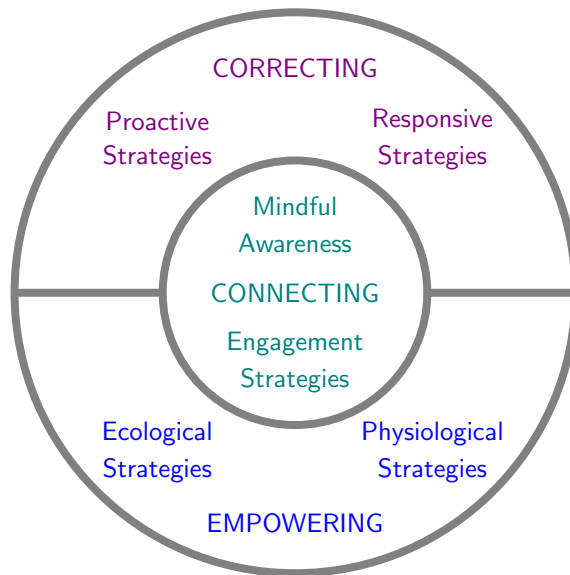Multi-Systemic

Culturally-Grounded

Figure 2: Trust-Based Relational Intervention® (TBRI®) can be divided into three sets of principles: The Connecting Principles are based on attachment theory, and include Mindful Awareness and the Engagement Strategies. The Empowering Principles help provide a stable platform for Connecting and Correcting, and include the Ecological Strategies and the Physiological Strategies. The Correcting Principles are designed to help adults shape the behaviors and skills of children and youth, and include the Proactive Strategies and the Responsive Strategies. TBRI is effective because these principles and strategies impact children and youth *synergistically* and *holistically* to promote healing and wellbeing.

As shown in Figure 2, TBRI consists of three sets of complementary and synergistic principles — Connecting Principles, Empowering Principles, Correcting Principles — each of which contains two sets of strategies (Purvis et al., 2007b, 2013). The *Connecting Principles* emphasize *Mindful Awareness,* which is the core competency of TBRI (see Buchholz, 2015; Siegel, 2007, 2009). The Connecting Principles also include the *Engagement Strategies,* which provide a framework for engaging with others in ways that prevent or minimize trauma-based responses such as anger, fear, and anxiety. The Engagement Strategies emphasize nonverbal modes of interpersonal engagement (see Mehrabian, 2007; Riess and Kraft-Todd, 2014), include facial expression, "soft eyes," authoritative (not authoritarian) voice, healthy touch, behavioral matching, and playful interaction. The Connecting Principles are grounded in universal principles arising from attachment theory, practice, and research, as well as neurodevelopmental principles arising from the neuroscience of relational trauma.

Connecting Principles

The Correcting Principles contain the Proactive Strategies and the Responsive Strategies. The *Proactive Strategies* include Life Value Terms, such as "Gentle and Kind," "Use Your Words," and "With Respect," that are designed to become the language of a trauma-informed culture (see Purvis et al., 2012). Importantly, we encourage families, organizations, and communities to tailor these concepts and terms in such a way that are appropriate for those being served. The Proactive Strategies also include Behavioral Scripts, including Choices, Compromises, and ReDos, which help structure adult-child interactions so as to share power, give voice, and find appropriate means of meeting needs (see Abelson, 1981; Keltikangas-Järvinen and Liisa Asplund-Peltola, 1995).

Correcting Principles

I	Immediate (3 sec. or less)
D	Direct (Engagement Strategies)
E	Efficient (Levels of Response)
A	Action-based (Behavioral Scripts)
L	Leveled at the behavior, and *not* the child

Figure 3: TBRI-based interactions with children and adolescents are guided by the IDEAL Response©, which means that adult responses are Immediate, Direct, Efficient, Action-based, and Leveled at the behavior, not the child. "Direct" means that adults deploy the *Engagement Strategies,* discussed above. "Efficient" means that "We don't go after a mosquito with an elephant gun" — we stay at the lowest Levels of Response possible (see below). "Action-based" means that the child or adolescent is actively involved in learning, as with the Behavioral Scripts, discussed above. Finally, TBRI-based interactions with children and adolescents are leveled at the behavior, and *not* the child, which implies that IDEAL responses are examples of what White (2007) calls "externalizing conversations."

The Responsive Strategies include The IDEAL Response, which is an overarching framework for guiding adult-child (and adult-adult!) interactions, especially in challenging circumstances (see Figure 3). The Responsive Strategies also include Levels of Response — Playful Engagement, Structured Engagement, Calming Engagement, Protective Engagement — with the idea being that when working with children and youth from hard places, we as adults try to live at the lowest level — Playful Engagement — and only move up to higher levels as needed to manage the situation, and then immediately return to the lower levels (see Figure 4).
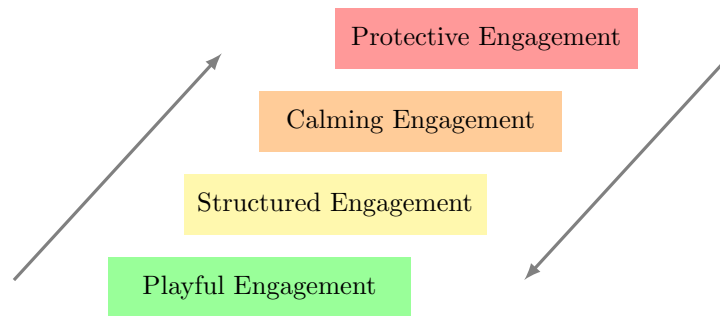

Figure 4: Levels of Response suggests a scale, or ladder, of responses corresponding to gradually more serious challenges or situations. When there is no challenge, or there is a slight challenge, *Playful Engagement* is appropriate ("Are you askin' or tellin'?" — said playfully). When there is a mild challenge, *Structured Engagement* is appropriate (e.g., "You have two choices"). When emotions are running high, and self-regulation is fragile, then *Calming Engagement* is appropriate ("How about we take a walk, and cool down a bit?"). When there is danger, either to the child, yourself, or someone else, then *Protective Engagement* may be appropriate (e.g., SAMA or CPI). As a general rule, it is best to remain at the lower levels whenever possible.

The Empowering Principles contain the Physiological Strategies and the Ecological Strategies. The *Physiological Strategies* focus on the "Wisdom of the Body" (see Cannon, 1939; Kabat-Zinn, 2013; Moll, 2014) and emphasize meeting bodily needs such as hydration, nutrition, sleep, blood sugar, physical activity, and sensory processing. The *Ecological Strategies* focus on the "Wisdom of Places" (see Basso, 1996; Cummins et al., 2007; Manzo and Devine-Wright, 2013), and emphasize the scaffolding of emerging competencies through rituals, ceremonies, daily schedules, and culturally-relevant artifacts and activities.

Empowering
Principles

5

TBRI Training and Resources

Training in TBRI occurs in four main ways. First, although the Institute's primary focus is to train professionals, KPICD staff in addition participate in a few conferences that reach large numbers of parents living in North America and elsewhere (e.g., *Empowered to Connect*). Including both face-to-face trainings and simulcasts, these parent-oriented trainings have been reaching approximately 25,000 parents annually. Second, as part of our effort to help build trauma-informed communities, KPICD staff and partners hold numerous one- or two-day trainings each year. One-day trainings are designed to give broad overviews of relational trauma (e.g., ACEs) and trauma-informed interventions, emphasizing TBRI. Two-day trainings are designed not only to provide these overviews, but also to teach a relatively small number of principles and strategies that are suitable to the community or organizational context. For example, if the audience is primarily school staff, the training would emphasize application of TBRI Principles and Strategies in the classroom setting, and KPICD staff would co-train with TBRI Practitioners who are actively engaged in the implementation of TBRI in educational settings. Third, as part of our effort to create networks of trauma-informed partners, KPICD staff conduct five TBRI Practitioner Trainings each year. Practitioner Training (PT) is a train-the-trainer model, the goal of which is produce change agents, who can lead, train, and inspire the implementation of TBRI within their organizations and communities. Trainees are carefully selected (about 1 in 3 applicants are chosen), and then participate in approximately 40 hours of online pre-training, followed by five days of onsite training with KPICD staff and partners for an intensive learning experience that includes lectures, activities, role-play, and networking. The fourth way that TBRI training occurs is when these TBRI Practitioners return to their organizations and communities, and begin training themselves, using resources provided by the KPICD, as well as resources they develop themselves, in collaboration with KPICD staff.

The KPICD has produced a wide variety of resources that supplement the Institute's various training formats. Foremost among these are the professionally-produced DVDs in the KPICD's *Healing Families* series, which are available both as DVDs and as digital downloads (see child.tcu.edu). In addition to the *Healing Families* series, there is "TBRI for Teens" and the TBRI Lecture Series. The Institute has also produced a *TBRI Pocket Guide,* which is popular among our trainees, and is being contextualized by creating versions tailored to different implementation settings (e.g., juvenile justice). Other important resources include the Institute's 3-minute animates, which provide quick yet effective introductions to trauma- and TBRI-related topics. There are now five animates, including the following topics: TBRI Overview, Attachment, Toxic Stress, The IDEAL Response, and CST Trafficking. Finally, the Institute produces and distributes tip sheets, wall posters, figits, t-shirts, and *The Connected Child*, the source book for TBRI. This range of TBRI-based resources supplements and enhances training and learning, which supports implementation of TBRI, and integrity with the model. Further, most of these resources have been translated

into Spanish, with the goal of having all of the KPICD resources translated into several other languages, as the work of the KPICD extends around the globe.

TBRI Training Principles

The aim of this section is to apply Patrick E. Parrish's "Aesthetic principles for instructional design" (Parrish, 2009) to the two primary training formats deployed by KPICD staff: The two-day trainings and the five-day Practitioner Training. The rationale for doing this is to reveal the design principles that are implicit to the KPICD's training formats, and in so doing to suggest reasons why training is such an important component of the KPICD Intervention Model. I start by outlining the narrative structure of the KPICD trainings, and then apply the five aesthetic principles to this instructional design. The KPICD trainings have three parts, and six sections, as follows:

Part I Beginning: Describing the Problem

1. *Organizing Resilience in Humans: Attachment Processes*
   - Caregiver-child interactions have characteristic patterns of organization (e.g., "good enough" parenting);
   - these dyadic patterns shape the affective, behavioral, and cognitive patterns that the developing child brings to the world (e.g., "securely attached");
   - these affective, behavioral, and cognitive patterns influence the child's adaptation to the developmental challenges of school, the peer group, and partner intimacy (i.e., "ego-resilience").

2. *Disruption & Disorganization: Relational Trauma*
   - "Relational trauma" refers to serious victimizations and disruptions within the ongoing organization of caregiver-child interactions;
   - due to the centrality of caregiver-child interactions (i.e., attachment processes) in the child's development, relational trauma has adverse effects on the child's brain, body, biology, behavior, and beliefs;
   - it is possible to repair the harm done by relational trauma, by recruiting the same attachment processes that organize ego-resilience in the absence of trauma, and by implementing a complementary set of supporting strategies.

Part II Middle: Describing the Solution

3. *Reorganization & Repair: Connecting Principles*
   - TBRI is designed to repair the harm done by relational trauma, by reorganizing patterns of affect, behavior, and cognition — and the Connecting Principles are at the heart of this effort (see Figure 2);

7

- and *Mindful Awareness* makes everything else work, and should be considered the core capacity of TBRI;
- the *Engagement Strategies* can be viewed as the "face" of mindful awareness, and are based on the principle that nonverbal modes of communication are more impactful than are verbal modes of communication, especially when working with trauma survivors.

4. *Reorganization & Repair: Correcting Principles*
- TBRI is like a two-sided coin, with the Connecting Principles on one side, and the Correcting Principles on the other — both sets of principles apply to face-to-face interactions with children and youth, and both sets of principles are necessary for building trust and changing behavior;
- the *Proactive Strategies* are designed to promote social competence, and include the *Life Value Terms* and *Behavioral Scripts;*
- the *Responsive Strategies* provide a framework for interacting with children and youth, especially in the context of challenging interactions (see Figures 3 and 4).

Part III Ending: Implementing the Solution

5. *Reorganization & Repair: Empowering Principles*
- Whereas the Connecting and Correcting Principles pertain to the face-to-face engagements that make up the micro-structure of daily caregiving, the Empowering Principles pertain to the informed planning and scheduling that make up the macro-structure of daily caregiving;
- the *Physiological Strategies* are designed to support the "Wisdom of the Body," and include being mindful about the body's needs for hydration, physical activity, and sensory modulation;
- the *Ecological Strategies* reflect the "Wisdom of Places," and include being mindful about transitions, rituals, and the scaffolding of the child's emerging competencies.

6. *Organizing Cultural Resilience: TBRI Implementation*
- Effective implementation of TBRI requires creating a trauma-informed, caregiving culture based on Connecting, Correcting, and Empowering;
- In our model — the KPICD Intervention Model — implementation occurs in three phases: Exploration, Immersion, Extension (see Figure 5, below);
- Further, we have found that effective implementation is based on seven implementation principles (see Figure 6, below).

As you can see, the TBRI Trainings are structured like a three-part play: Beginning, Middle, Ending. This structure reflects Parrish's first principle:

Principle 1: Learning experiences have beginnings, middles, and endings (i.e., plots)

Parrish makes five recommendations that can guide implementation of Principle 1 (my annotations are shown in parentheses):

- *Begin by instilling tension, posing a problem, or pointing out conflicting information* (notice that Part I does this by contrasting those processes (attachment) that organize resilience, with those processes (victimization) compromise resilience);

- *Learning experiences should create anticipation of consummation* (the three-part structure of the training builds towards a solution to the problem posed in the first part);

- *Create sustained suspense by enhancing the complication* (this is done in a number of ways during the training, but one primary way is the complication created by the intrinsic tension between Connecting and Correction — "Nurture and Structure");

- *Pattern, routine, or an established motif can sustain engagement* (one way this is done in the KPICD trainings is through the repeated interplay between theory and practice, or concept and application);

- *Endings should integrate everything that has occurred up to that point* (one way this is done is through the introduction of scaffolding and the Zone of Proximal Development as overarching frameworks for Connecting, Correcting and Empowering; another way is by discussing implementation at the end, which is necessarily integrative).

Parrish's second principle of aesthetic design focuses on the learners themselves:

Principle 2: Learners are the protagonists of their own learning experience

Parrish makes three recommendations that can guide implementation of Principle 2 (again, my annotations are shown in parentheses):

- *Accept that learners, as protagonists, are fully human* (one way this is done in the KPICD training is by providing a rich array of learning experiences, including presentations, video, experiential learning activities, opportunities for discussion and networking, and recognition of learners' strengths and creativity);

- *Allow dialogue to reveal character* (opportunities for dialogue are especially rich in the five-day Practitioner Training, where learners participate in several dialogue-rich contexts, including mentored role play groups and topical breakout groups);

- *Foster a change or growth in sense of identity; make learning a rite of passage* (opportunities are greater in the five-day Practitioner Training, which includes participation in the Adult Attachment Interview — with immediate feedback — and participation in role play groups, including a final evaluation).

Parrish's third principle of aesthetic design emphasizes the importance of learning activity (see Engeström and Sannino, 2010; Engeström, 2016):

Principle 3: Learning activity, not subject matter, establishes the theme of instruction

Parrish makes two recommendations that can guide implementation of Principle 3 (again, my annotations are shown in parentheses):

- *Theme and plot arise from subject matter but should be more than subject matter* (the primary theme of KPICD training is that TBRI is an *activity* that must be performed "on the floor," which is how it was originally developed by Dr. Purvis — sitting on the floor, meeting the needs of children "from hard places");

- *The theme should be believable and connect to experience* (during our training we make the theme — that TBRI is an activity — believable in a number of ways, including an extensive video library of TBRI demonstrations, and testimonials from partners who are actively implementing TBRI in their own professional context).

Parrish's fourth principle of aesthetic design emphasizes the importance of instructional context:

Principle 4: Context contributes to immersion in the instructional situation

Parrish makes two recommendations that can guide implementation of Principle 4 (again, my annotations are shown in parentheses):

- *Allow context to support theme and character* (a basic way that we choose contexts to support the central theme of the training is to only select venues that will support the breakout and role play activities, which require numerous small spaces in addition to the central presentation space);

- *Honor setting in instruction* (we honor setting in two important ways: first, by locating trainings geographically to support implementation of TBRI in those areas, and second, by tailoring trainings to relevant geographical, cultural, or professional contexts of the training).

Parrish's fifth principle of aesthetic design emphasizes the importance of the instructor:

Principle 5: Instructors and instructional designers are authors, supporting characters, and model protagonists

Parrish makes three recommendations that can guide implementation of Principle 5 (again, my annotations are shown in parentheses):

- *The instructor or designer is also a key character in the experience* (at various times during the trainings, KPICD staff and mentors adopt a number of supporting roles, including those of commentator, confidant, provocateur, or "guide by the side");

- *Instructors and designers also have important roles as experienced learners, or model protagonists* (most KPICD staff and mentors have extensive experience implementing TBRI, and many have themselves experienced relational trauma);

- *Instructors and designers must to a degree be in love with their subject matter and the process of learning it and be willing to reveal their feelings about it* (KPICD staff, mentors, and trainers are chosen for their passion for this work — we are fortunate to have such a highly qualified and highly passionate "stable" of trainers and consultants to choose from).

Hopefully this section on TBRI Training Principles yields some insight about how the KPICD training formats reflect Parrish's "aesthetic principles of instructional design." It is my belief that this aesthetic quality, combined with the efficacy of TBRI itself, drives both "consumer satisfaction" and the extraordinary demand for the training. In the next section, we move from training to implementation, the third of the four components shown in Figure 1.

Three Phases of TBRI Implementation

The work of the KPICD rests on a three-legged stool. One leg of the stool is TBRI itself — the intervention model. A second leg of the stool is our training framework, briefly described in the previous section. It is worth noting that the guiding philosophy for our training can be found in a paper by Patrick E. Parrish, with the title "Aesthetic principles for instructional design" (Parrish, 2009). Aesthetic principles emphasize narrative, affect, experience, context, and purpose. These principles also guide, at a general level, the KPICD's implementation and evaluation framework, which is the third leg of the stool.

Implementation of TBRI by organizations and/or communities typically occurs in three phases. During the first phase, which might be called "Exploration," KPICD staff explore the possibility of a partnership with organizational and/or community leaders. Almost always, these exploratory conversations have been initiated by the leaders themselves, and the overarching goal of these conversations is to determine if we can meet each others' needs. By this I mean, on the one hand, can the KPICD meet the trauma-related needs of the organization and/or community? And, on the other hand, can the potential partner help
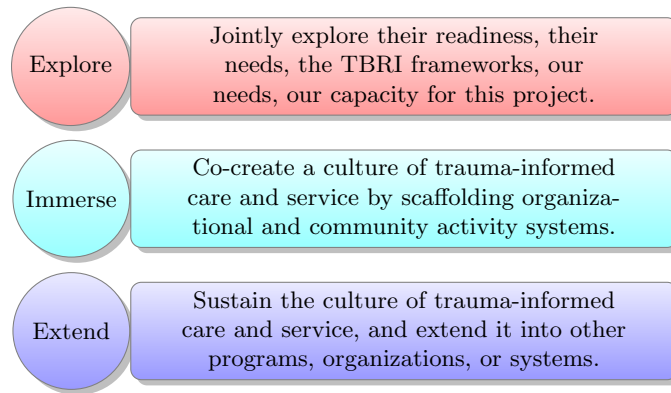
Phase I: Exploration

Figure 5: TBRI implementation typically occurs in three phases. During the first phase, *exploration,* we address issues such as organizational readiness, our ability to meet the organization's needs, their ability to meet our needs, and informing them about the frameworks described in this paper. During the second phase, *immersion,* we co-create with the organization (or community) a culture of trauma-informed care and service through training and consultation, by scaffolding their activity system through the Zone of Proximal Development (individually and organizationally). During the third phase, *extension,* the partner organization or community sustains and grows the culture of trauma-informed care and service, perhaps by extending it into other programs, other organizations, or other systems of care and service.

the KPICD achieve its vision (25-25-25) and mission (TRC)? Very often, the Exploration phase involves a few one- or two-day trainings by KPICD staff, so that potential partners know more about what the KPICD brings to the table. It is also common for a key person to become trained as a TBRI Practitioner, so they can help the organization and/or community determine the suitability of TBRI to their needs. If it is determined by both parties that a joint project would meet the needs of both sides, then we would move on to the next phase, which might be called "Immersion."

During Immersion the goal is to "go deep" with training and consultation, so that we can co-create a culture of trauma-informed care and service with the new partner. Immersion activities typically include (a) training a certain number of TBRI Practitioners who act as change agents within the organization and/or community, (b) continue offering large-scale one- and two-day trainings in TBRI, to build community-wide awareness, understanding, and expertise, (c) offering ongoing consultations with organizational staff and leadership, and (d) distributing resource materials to supplement and support the training and consulting activities. It is important to realize that during this phase it is not enough to schedule trainings — organizational and community leaders must also be willing to take the (often difficult) steps necessary to create a trauma-informed culture within their organizations and communities. Typically, it is

Phase II: Immersion

these "behind the scenes" activities that make or break a trauma-informed effort. For example, it has been our experience that successful implementation almost always involves policy and/or structural changes, initiated by leadership, that support the training and consultation, and are derived from the training and consultation.

The overarching goal of Immersion is to co-create a trauma-informed culture of care and service that is both effective and sustainable. The KPICD will never be completely out of the picture, but its proper role is to scaffold the emerging trauma-informed culture, so that the community can function independently further down the road. Leadership and the TBRI Practitioners (change agents) have key roles in this, and bear the responsibility for maintaining the health and vibrancy of the new trauma-informed culture. Once Immersion has been achieved, many of the KPICD's partners move into a third phase, which could be called "Extension." During this phase, leaders and change agents may extend the trauma-informed culture into new segments of the community (e.g., schools, juvenile justice), or into nearby communities. Some level of relationship with the KPICD continues to be desirable, since new change agents will need to be trained, and current change agents will need to be kept up to speed on advances in knowledge and practice. The KPICD operates on a "Pay It Forward" basis, since we expect our current partners to assist with training and implementation of new partners, a tradition that benefits everyone involved.

The three phases of TBRI implementation can be viewed as a dance. During the first phase, Exploration, the question is, "Shall we dance?" Both parties are asking the question, "Is this the right partner for me?" During Immersion both parties have moved on to "Let's dance!" Now partners co-script the dance, based on each others' needs, talents, and goals. Finally, during Extension, the partners move on to "Dancin' the night away!" Now, the script has been written, the dancing endures, and may also involve additional partners. It is important to realize that although the three phases share similarities across partners, dance scripts may look very different, depending upon the particulars of partner organizations and communities.

TBRI Implementation Principles

Implementation of TBRI is guided by seven complimentary and synergistic principles:

Be Trust-Based and Relational

As we engage with organizations and communities in our work, we strive to follow the TBRI Principles and Strategies, described above, as guides about how to interact with others and among ourselves. As is implied by our vision statement — which rests on a foundational network of trusted partners — trust-based relationship are key to our success at bringing hope and healing to vulnerable children.

Be Trauma-Informed

TBRI is a trauma-informed intervention that we seek to implement according to the principles of trauma-informed care and service. We recognize, for example, that in order to address the traumatic histories of vulnerable children, we must also address the traumatic histories of those that care for them, or serve them as professionals. Further, we acknowledge the importance of current frameworks for trauma-informed care and service, such as Howard Bath's "Three Pillars of Trauma-Informed" care: Felt-Safety, Connection, Guided Self-Regulation (Bath, 2008, 2015; Bath and Seita, 2018).

Be Humble Yet Driven

In his study of companies that grew from "Good" to "Great," Jim Collins found that the leaders of these companies demonstrated two personal characteristics: personal humility and fierce determination (Collins, 2001b,a). Importantly, and not coincidently I believe, the same two virtues are at the top of the list in *The Lakota Way* (III, 2001). At the KPICD we may be "experts" at trauma and trauma-informed care, but we strive to practice cultural and organizational humility when it comes to the lives, histories, and communities of those we serve (see Clabby, 2017). As was mentioned above, we often find that when we engage with indigenous cultures, we quickly become learners not only about their cultures, past and present, but also about deep-rooted principles of trauma-informed care and practice.

It's a Journey

We recognize that when we partner with an organization or a community that it is a journey — a journey that we make together. Like all journeys, there will be ups and downs, detours, frustrations, celebrations, mistakes made, and joyful discoveries. We embrace theoretical perspectives such as Glen Elder's Life Course Perspective, which emphasizes the historical, developmental, and contextual aspects of individual (and organizational) journeys (Elder and Giele, 2009; Elder et al., 2015). We also recognize that a life well-lived (organizational or otherwise) is guided by core values, but also involves course corrections as progress is made and situations change. In this regard we have found cybernetic principles such as those found in John Boyd's Observe-Orient-Decide-Act (OODA) Loop helpful as we and our partners navigate the complex waters of organizational, community, and professional change (see Enck, 2012; Osinga, 2007).

Embrace Systems Thinking

During the 20-year history of the KPICD, we have learned that the most effective approach to bringing hope and healing to vulnerable children is to change the systems that encompass them (see Foster-Fishman et al., 2007; Kreger et al.,

2007; Stroh, 2015). We are guided in this work by Bronfenbrenner's Bioecological Model, which emphasizes the connections and transitions between different components of a child's ecology (Bronfenbrenner and Morris, 2006; Harney, 2007; Tudge et al., 2009). For example, we know that children will thrive when connections are strong between home and school. We also know that children do best when their communities promote healthy rituals and rites of passage that help their children and youth navigate the challenging transitions associated with growing up (Crespo et al., 2011; Markstrom and Iborra, 2003; Rossano, 2012).

Embrace Complexity Concepts

As a general rule, when we implement trauma-informed programs we are interacting with complex adaptive systems (see Ford, 2008, 2010). Following the work of David Snowden, we recognize that situations can be simple, complicated, complex, or chaotic, and that the "rules of engagement" will differ among these different types of situations (Snowden and Boone, 2007; Snowden, 2011). When operating within complex adaptive systems, such as the organizations and communities we serve, we further recognize, for example, that small inputs can have large outputs. To take but one example from our own work, we have seen a seemingly simple change, such as the use of Choices (one of the Proactive Strategies from the TBRI Correcting Principles), can create a cascade of changes within a home or classroom (see Patterson et al., 2010).

Ride the ZoPeD

The Zone of Proximal Development (ZoPeD) is a core concept of the cultural-historical theory of Lev Vygotsky and his intellectual descendents (Engeström and Sannino, 2010; Holzman, 2009; Sannino et al., 2016). The ZoPeD refers to the "space" between what an individual, organization, or community can do on their own (independent performance) and what they can do with assistance (assisted performance). The ZoPeD is the space where learning can occur, and learning progresses — wave-like — as new skills and knowledge are gained. Gifted teachers, coaches, parents, therapists, and mentors operate within the ZoPeD, which implies that they are sensitive to individual and communal needs, and to the readiness of those they teach. Contemporary versions of cultural-historical theory conceptualize organizations and other communities as *activity systems,* which can be characterized by their cultural tools (e.g., use of choices, talking sticks), roles (e.g., parents, mentors), rules (e.g., rules for TBRI nurture groups, talking circles), and the objects of their activity, which is how the community or organization makes sense of its purpose, activity, and place in the world. From this perspective, implementation of trauma-informed practices in organizations and/or communities is a matter of scaffolding emerging activity systems within the ZoPeD. An important feature of the activity system concept is that it explicitly recognizes the voices of everyone in the system: leaders, professionals, parents, children, and youth (Meyer and Lees, 2013).

Developmental Evaluation

Developmental Evaluation represents a promising framework for evaluating and informing TBRI training and implementation (see Patton, 2011; Patton et al., 2016). The eight principles of developmental evaluation are listed here, based on Patton (2016). The dynamic relationship between the seven TBRI implementation principles and the eight principles of developmental evaluation is portrayed in Figure 6.

Developmental purpose principle

Illuminate, inform, and support what is being developed [trauma-informed activity systems], by identifying the nature and patterns of development (innovation, adaptation, systems change), and the implications and consequences of those patterns. According to Patton (2016, p. 293),

> The purpose of developmental evaluation is *developmental.* Some kind of innovation is being *developed.* The evaluation tracks what is being developed and how it is being developed—the nature and implications of innovative and adaptive processes. And because the innovation is developing, the evaluation must be developed. The design and implementation of a developmental evaluation are emergent and adaptable as the innovative process emerges and adapts. Developmental evaluation is characterized by short cycles of design, data collection, feedback, and evaluative synthesis and reflection [i.e., OODA loops].

Evaluation rigor principle

Ask probing evaluation questions; think and engage evaluatively; question assumptions; apply evaluation logic; use appropriate methods; and stay empirically grounded—that is, rigorously gather, interpret, and report data. According to Patton (2016, p. 296),

> In an evaluation, rigorous thinking is manifest in the full range of activities—from framing hypotheses; to seeking and validating information; to analyzing data; to collaborating to assess meaning of findings; and to questioning, testing, and reexamining results and conclusions. Evaluation rigor resides in diligent, systemic situation analysis, principles-based evaluative thinking, and appropriate methodological decision making with primary intended users. Rigorous evaluative thinking combines critical thinking, creative thinking, design thinking, inferential thinking, strategic thinking, and practical thinking.

Utilization focus principle

Focus on intended use by intended users from beginning to end, facilitating the evaluation process to ensure utility and actual use [the author's discussion of *system entrepreneurs* is useful in regards to this principle, and the system change work that engages the KPICD].

Innovation niche principle

Elucidate how the change processes and results being evaluated involve innovation and adaptation, the niche of developmental evaluation [the author's discussion of a *social innovation dynamic* is useful in regards to this principle, and the system change work that engages the KPICD]. The innovation niche principle is related to Wendell Berry's essay on "Solving for Pattern" (Berry, 2002), and the "Change Laboratory" methodology derived from activity theory (Sannino et al., 2016; Virkkunen and Newnham, 2013).

Complexity perspective principle

Understand and interpret [activity system] development through the lens of complexity, and conduct the evaluation accordingly. This means using complexity premises and dynamics to make sense of the problems being addressed; to guide innovation, adaptation, and system change strategies; to interpret what is developed; to adapt the evaluation design as needed; and to analyze emergent findings. Complexity concepts that have proven especially relevant to developmental evaluation include emergence, nonlinearity, adaptation, uncertainty, dynamical, and coevolution.

System thinking principle

Think systemically throughout, being attentive to interrelationships, perspectives, boundaries, and other key aspects of the social system and context within which the innovation is being developed and the evaluation being conducted. As mentioned above, Bronfenbrenner's bioecological model provides a useful systems lens for TBRI training and implementation.

Co-creation principle

Develop the innovation and evaluation together—interwoven, interdependent, iterative, and co-created—so that developmental evaluation becomes part of the system change process. Note that TBRI itself is pretty much a given, but its *implementation* must be co-created by ourselves in collaboration with our partners, using both sets of principles shown in Figure 6.

Timely feedback principle

Time feedback to inform ongoing adaptation as needs, findings, and insights emerge, rather than only at predetermined times (e.g., quarterly, or at midterm and end of project). According to Patton (2016, p. 308),

> *Timeliness* is defined by the nature of the innovation and the needs of the primary intended users. As such, determining timeliness is part of situation analysis and negotiation, not a matter of adhering to a precise and fixed schedule. Feedback is not rapid for the sake of being rapid. It's rapid because it must be to support timely decision making, adaptation, and fork-in-the-road funding and strategy decisions. Timeliness is driven in part by the recognition that evaluation findings have a short shelf life, especially in turbulent environments. What is relevant and meaningful can change rapidly. Keeping findings fresh and useful requires speed. The capacity to work quickly is an essential capability in developmental evaluation. [Once again, think of the OODA loop.]

References

Abelson, R. P. (1981). Psychological status of the script concept. *American Psychologist*, 36(7):715–729.

Basso, K. H. (1996). *Wisdom sits in places: Landscape and language among the Western Apache.* The University of New Mexico Press, Albuquerque, NM.

Bath, H. (2008). The three pillars of trauma-informed care. *Reclaiming Children and Youth*, 17(3):17–21.

Bath, H. (2015). The pillars of traumawise care: Healing in the other 23 hours. *Reclaiming Children and Youth*, 23(4):5–11.

Bath, H. and Seita, J. (2018). *The three pillars of transforming care: Trauma and resilience in the other 23 hours.* UW Faculty of Education Publishing, Winnipeg, Manitoba, Canada.

Berry, W. (2002). Solving for pattern. In Wirzba, N., editor, *The art of the commonplace: The agrarian essays of Wendell Berry*, pages 267–285. Counterpoint, Berkeley, CA.

Brand, S. L., Coon, J. T., Fleming, L. E., Carroll, L., Bethel, A., and Wyatt, K. (2017). Whole-system approaches to improving the health and wellbeing of healthcare workers: A systematic review. *PLOS ONE*.

Bronfenbrenner, U. and Morris, P. A. (2006). The bioecological model of human development. In Damon, W. and Lerner, R. M., editors, *Handbook of child psychology, volume 1: Theoretical models of human development*, pages 793–828. John Wiley & Sons.

Evaluation Principles | Implementation Principles

Developmental Purpose | Trust-Based & Relational
Evaluation Rigor | Trauma-Informed
Utilization Focus | Humble & Persistent
Innovation Niche | Journey-Oriented
Complexity Lens | Complexity Lens
Systems Thinking | Systems Thinking
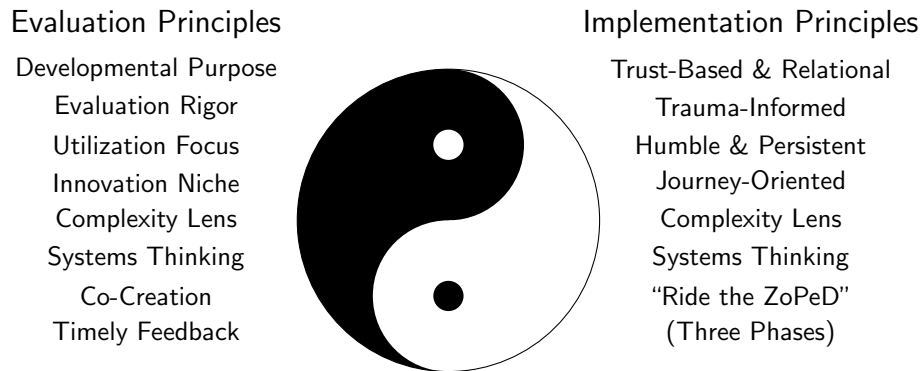Co-Creation | "Ride the ZoPeD"
Timely Feedback | (Three Phases)

Figure 6: The dynamic relationship between developmental evaluation and TBRI implementation can be viewed through the lens of the daoist yin-yang concept. Yin (dark) and yang (white) can be thought of as complementary (rather than opposing) forces that interact to form a dynamic system in which the whole is greater than the assembled parts. In this formulation, TBRI implementation constitutes the yang, which drives system change through training and implementation efforts. However, implementation is grounded in the evaluation aspect (yin), which provides (some of) the information necessary for changes in implementation strategy and direction. The white dot represents the capacity for developmental evaluation to inform implementation, and the black dot represents the necessity for evaluation to be responsive to implementation processes. The relationship is dynamic — as in night and day — since the overall effort will at times emphasize implementation, while at other times emphasizing evaluation, but always in a dynamic and timely fashion.

Buchholz, L. (2015). Exploring the promise of mindfulness as medicine. *JAMA: Journal of the American Medical Association*, 314(13):1327–1329.

Cannon, W. B. (1939). *The wisdom of the body: How the human body reacts to disturbance and danger and maintains the stability essential to life.* Norton, New York.

Cassidy, J. and Shaver, P. R., editors (2016). *Handbook of attachment: Theory, research, and clinical applications.* Guilford Press, New York, 3rd edition.

Clabby, J. F. (2017). Enter as outsider: Teaching organizational humility. *The International Journal of Psychiatry in Medicine*, 52(3):219–227.

Collins, J. (2001a). *Good to great: Why some companies make the leap . . . and others don't.* HarperCollins, New York.

Collins, J. (2001b). Level 5 leadership: The triumph of humility and fierce resolve. *Harvard Business Review*, pages 1–12. HBR OnPoint Article 5831.

Crespo, C., Kielpikowski, M., Pryor, J., and Jose, P. E. (2011). Family rituals in New Zealand families: Links to family cohesion and adolescents' well-being. *Journal of Family Psychology*, 25(2):184–193.

Cummins, S., Curtis, S., Diez-Roux, A. V., and Macintyre, S. (2007). Understanding and representing 'place' in health research: A relational approach. *Social Science & Medicine*, 65:1825–1838.

Diamond, A. (2010). The evidence base for improving school outcomes by addressing the whole child and by addressing skills and attitudes, not just content. *Early Education and Development*, 21(5):780–793.

Dooris, M., Poland, B., Kolbe, L., de Leeuw, E., McCall, D. S., and Wharf-Higgins, J. (2007). Healthy settings: Building evidence for the effectiveness of whole system health promotion—challenges and future directions. In McQueen, D. V. and Jones, C. M., editors, *Global perspectives on health promotion effectiveness*, pages 327–352. Springer Science + Business Media.

Edwards, A. (2009). Relational agency in collaborations for the well-being of children and young people. *Journal of Children's Services*, 4(1):33–43.

Elder, G. H. and Giele, J. Z. (2009). *The craft of life course research*. Guilford Press, New York.

Elder, G. H., Shanahan, M. J., and Jennings, J. A. (2015). Human development in time and place. In Bornstein, M. H., Leventhal, T., and Lerner, R. M., editors, *Handbook of child psychology and developmental science: Ecological settings and processes*, pages 6–54. John Wiley & Sons, New York.

Enck, R. E. (2012). The OODA loop. *Home Health Care Management and Practice*, 24(3):123–124.

Engeström, Y. (2016). *Studies in expansive learning: Learning what is not yet there*. Cambridge University Press, New York.

Engeström, Y. and Sannino, A. (2010). Studies of expansive learning: Foundations, findings and future challenges. *Educational Research Review*, 5(1):1–24.

Ford, R. (2008). Complex adaptive systems and improvisation theory: Toward framing a model to enable continuous change. *Journal of Change Management*, 8(3–4):173–198.

Ford, R. (2010). Complex adaptive leading-ship and open-processional change processes. *Leadership & Organization Development Journal*, 31(5):420–435.

Foster-Fishman, P. G., Nowell, B., and Yang, H. (2007). Putting the system back into systems change: a framework for understanding and changing organizational and community systems. *American Journal of Community Psychology*, 39:197–215.

Harney, P. (2007). Resilience processes in context: Contributions and implications of Bronfenbrenner's person-process-context model. *Journal of Aggression, Maltreatment & Trauma*, 14(3):73–87.

Holzman, L. (2009). *Vygotsky at work and play.* Taylor & Francis, London.

III, J. M. (2001). *Lakota ways: stories & lessons for living.* Viking.

Kabat-Zinn, J. (2013). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness.* Bantam, New York, revised edition.

Keltikangas-Järvinen, L. and Liisa Asplund-Peltola, R. (1995). Agreement between social problem-solving scripts of aggressive and sociable adolescents and their parents. *Aggressive Behavior*, 21(6):419–429.

Kline, K. K., editor (2008). *Authoritative communities: The scientific case for nurturing the whole child.* Springer, New York.

Kreger, M., Brindis, C. D., Manuel, D. M., and Sassoubre, L. (2007). Lessons learned in systems change initiatives: benchmarks and indicators. *American Journal of Community Psychology*, 39:301–320.

Manzo, L. C. and Devine-Wright, P., editors (2013). *Place attachment: Advances in theory, methods, and applications.* Routledge, New York.

Markstrom, C. A. and Iborra, A. (2003). Adolescent identity formation and rites of passage: The Navajo Kinaaldá ceremony for girls. *Journal of Research on Adolescence*, 13(4):399–425.

Mehl-Madrona, L. (1997). *Coyote medicine: Lessons from Native American healing.* Simon and Schuster, New York.

Mehl-Madrona, L. (2003). *Coyote healing: Miracles in native medicine.* Bear & Company, Rochester, VT.

Mehl-Madrona, L. (2005). *Coyote wisdom: The power of story in healing.* Bear & Company, Rochester, VT.

Mehrabian, A. (2007). *Nonverbal communication.* Aldine Transaction, Chicago, IL.

Meyer, E. and Lees, A. (2013). Learning to collaborate: An application of activity theory to interprofessional learning across children's services. *Social Work Education*, 32(5):662–684.

Moll, R. (2014). *What your body knows about God: How we are designed to connect, serve and thrive.* InterVarsity Press, Downers Grove, IL.

Osinga, F. (2007). *Science, strategy and war: The strategic theory of John Boyd.* Routledge, Oxford.

Parrish, P. E. (2009). Aesthetic principles for instructional design. *Educational Technology Research and Development*, 57:511–528.

Patterson, G., Forgatch, M. S., and DeGarmo, D. S. (2010). Cascading effects following intervention. *Development and Psychopathology*, 22(4):949–970.

Patton, M. Q. (2011). *Developmental evaluation: Applying complexity concepts to enhance innovation and use*. Guilford Press, New York.

Patton, M. Q. (2016). The developmental evaluation mindset: Eight guiding principles. In Patton, M. Q., McKegg, K., and Wehipeihana, N., editors, *Developmental evaluation exemplars: Principles in practice*, chapter 15, pages 289–312. Guilford Press, New York.

Patton, M. Q., McKegg, K., and Wehipeihana, N., editors (2016). *Developmental evaluation exemplars: Principles in practice*. Guilford Press, New York.

Purvis, K., Cross, D., Jones, D., and Buff, G. (2012). Transforming cultures of care: A case study in organizational change. *Reclaiming Children and Youth*, 21(2).

Purvis, K. B. and Cross, D. R. (2006). Improvements in salivary cortisol, depression, and representations of family relationships in at-risk adopted children utilizing a short-term therapeutic intervention. *Adoption Quarterly*, 10(1):25–43.

Purvis, K. B., Cross, D. R., Dansereau, D. F., and Parris, S. R. (2013). Trust-based relational intervention (TBRI): a systemic approach to complex developmental trauma. *Child & Youth Services*, 34(4):360–386.

Purvis, K. B., Cross, D. R., Federici, D. R., Johnson, D., and McKenzie, L. B. (2007a). The Hope Connection: A therapeutic summer camp for adopted and at-risk children with special socio-emotional needs. *Adoption & Fostering*, 31:38–48.

Purvis, K. B., Cross, D. R., and Lyons-Sunshine, W. (2007b). *The connected child: Bring hope and healing to your adoptive family*. McGraw-Hill, New York.

Purvis, K. B., Razuri, E. B., Howard, A. R. H., Call, C. D., DeLuna, J. H., Hall, J. S., and Cross, D. R. (2015). Decrease in behavioral problems and trauma symptoms among at-risk adopted children following trauma-informed parent training intervention. *Journal of Child and Adolescent Trauma*, 8(3):201–210.

Razuri, E. B., Howard, A. R. H., Parris, S. R., Call, C. D., DeLuna, J. H., Hall, J. S., Purvis, K. B., and Cross, D. R. (2016). Decrease in behavioral problems and trauma symptoms among at-risk adopted children following web-based trauma-informed parent training intervention. *Journal of Evidence-Informed Social Work*, 13(2):165–178.

Riess, H. and Kraft-Todd, G. (2014). E.M.P.A.T.H.Y.: A tool to enhance nonverbal communication between clinicians and their patients. *Academic Medicine*, 89(8):1108–1112.

Rossano, M. J. (2012). The essential role of ritual in the transmission and reinforcement of social norms. *Psychological Bulletin*, 138(3):529–549.

Sannino, A., Engeström, Y., and Lahikainen, J. (2016). The dialectics of authoring expansive learning: tracing the long tail of a Change Laboratory. *Journal of Workplace Learning*, 28(4):245–262.

Siegel, D. J. (2007). *The mindful brain: Reflection and attunement in the cultivation of well-being*. W. W. Norton, New York.

Siegel, D. J. (2009). Mindful awareness, mindsight, and neural integration. *The Humanistic Psychologist*, 37(2):137–158.

Siegel, D. J. (2012). *The developing mind: How relationships and the brain interact to shape who we are*. The Guilford Press, New York, 2nd edition.

Snowden, D. (2011). Naturalizing sensemaking. In Mosier, K. L. and Fischer, U. M., editors, *Informed by knowledge: Expert performance in complex situations*, Expertise: Research and Applications, chapter 14, pages 223–234. Psychology Press, New York.

Snowden, D. J. and Boone, M. E. (2007). A leader's framework for decision making. *Harvard Business Review*, pages 1–10.

Stroh, D. P. (2015). *Systems thinking for social change: A practical guide to solving complex problems*. Chelsea Green, Claremont, NH.

Tudge, J. R. H., Mokrova, I., Hatfield, B. E., and Karnik, R. B. (2009). Uses and misuses of Bronfenbrenner's bioecological theory of human development. *Journal Family Theory and Review*, 1:198–210.

Virkkunen, J. and Newnham, D. S. (2013). *The Change Laboratory: A tool for collaborative development of work and education*. Sense Publishers, Rotterdam.

White, M. (2007). *Maps of narrative practice*. Norton, New York.