From Pilot to Pandemic to Present: A Case Study Assessment of Trauma-Informed Implementation Science in Two Oregon High Schools

by

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DISSERTATION ABSTRACT

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Doctor of Education in Education Leadership

Title: From Pilot to Pandemic to Present: A Case Assessment of Trauma-Informed Implementation Science in Two Oregon Schools

This dissertation examines the sustainability, evolution, and meaning-making of trauma-informed practices among participants in Oregon's 2016 to 2019 Trauma-Informed Practices Pilot Study. Although trauma-informed initiatives have expanded nationally, limited empirical research has examined how these reforms endure after formal implementation support concludes, particularly across periods of systemic disruption.

Using a qualitative, participant-centered design, the study investigates how individuals across roles within and surrounding two Oregon high schools understood, adapted, sustained, or discontinued trauma-informed practices over time. Eight semi-structured interviews were conducted with participants representing school-based instruction, leadership, implementation coordination, state-level policy, external research, community partnership and intermediary organizations. Data were analyzed using reflexive thematic analysis to examine participant reflections spanning pilot implementation, post-pilot transition, and the COVID-19 pandemic.

The study does not evaluate institutional effectiveness or implementation fidelity, but foregrounds role-based interpretations and the mechanisms shaping long-term practice durability after external supports ended. Findings identify enabling and constraining conditions, role-based tensions, adaptive mechanisms including peer diffusion, cultural integration, and practice evolution that influenced sustainability across shifting institutional contexts.

By tracing these patterns across a 6-year post-pilot period that included pandemic disruption, the study analytically differentiates implementation drivers from sustainment mechanisms within a qualitative design. The research contributes to implementation science and trauma-informed education by specifying how reforms evolve once pilot infrastructure dissolves, offering implications for pilot design, funding allocation, policy integration, and large-scale educational initiatives seeking sustainable change under real-world constraint.

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Time and again, I was reminded that comfort at the table was a privilege not easily granted, and that the bar was often positioned just out of reach. Yet within that tension, I found purpose. Rather than shrinking back or remaining silent, I chose to advocate more fiercely, more persistently, and more courageously. This dissertation exists because it had to, and for that, I am grateful.

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DEDICATION

First and foremost, I dedicate this work to my children, my constant companions on this albeit unconventional journey. You did not choose this path or the circumstances that shaped our lives, but your presence beside me, always, has been my greatest source of strength, courage, and clarity. You have reminded me again and again why this work matters and kept me humble while doing so.

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CHAPTER I

1. INTRODUCTION

The American educational landscape has been fundamentally reshaped over the past decade by two intersecting developments:

1. The growing recognition of trauma's impact on student learning and development, which necessitated recent framework shifts centered on social-emotional learning, and
2. The unprecedented disruption caused by the COVID-19 pandemic across the nation and the world.

At the intersection of these two developments lies a critical question: What are the long-term effects of trauma-informed educational reform when implementation is followed by, and tested within, a global collective trauma event such as a pandemic?

In 2016, prior to the pandemic, the Oregon Department of Education (ODE) launched a pilot study of trauma-informed practice implementation in two Oregon high schools. Situated within a broader state policy context emphasizing discipline reform and student well-being, including policy developments such as Oregon State Legislature's House Bill 4002 (2016), the pilot represented an early state-supported effort in Oregon to systematically implement trauma-informed approaches within secondary school settings. Over its 3-year implementation period, the pilot engaged two schools with contrasting geographic, demographic, and cultural contexts. Participating schools received structured training, resources, and ongoing consultation to support the development of trauma-responsive educational environments with attention to barriers to student engagement, including chronic absenteeism. A central objective of the pilot was to examine how trauma-informed practices relate to changes in educator beliefs, school policies,

and professional practices, particularly as they support student engagement and attendance. The study was explicitly focused on implementation processes and organizational change and did not measure student-level academic or behavioral outcomes. The ODE's Trauma-Informed Practices Pilot Study functioned as both a formally evaluated study and a statewide implementation initiative. In this manuscript, references to the Pilot Study encompass its design and evaluation as well as the enactment and legacy of trauma-informed practices following the conclusion of formal pilot supports (ODE, 2019).

1.1. Implementation Science Framing

The pilot aligned with principles of implementation science to examine adoption, enactment, and diffusion of trauma-informed practices within complex educational systems. Instead of concentrating solely on training delivery, the initiative sought to understand the interaction between intervention components and contextual conditions, including competing initiatives, staffing stability, leadership support, and community dynamics. Trauma-informed reform was thus framed as an organizational change process, not as a discrete program. Implementation science literature conceptualizes this work as moving through identifiable stages, from exploration, preparation, implementation and sustainment, while recognizing that each phase requires distinct supports and leadership functions, along with attention to organizational context (Aarons et al., 2011; Fixsen et al., 2005).

Across the 3-year period, the two pilot schools implemented 26 strategies that combined professional development, implementation coaching, policy review and revision, and community partnership development. All staff received tiered training beginning with trauma awareness, followed by deeper training for implementation teams known as cohorts. These cohorts functioned as local change agents and led school-wide efforts to integrate trauma-informed

approaches into multiple domains including physical environment, classroom strategies, discipline practices, staff wellness structures, and community collaboration.

Early findings were promising, though not without complications. From an implementation science perspective, progress was most visible in adult learning, shifts in professional language, policy revisions, and changes in communication patterns. Participants reported increased awareness of trauma, expanded student leadership opportunities, and strengthened connections with families and community partners. Trauma-informed revisions were incorporated into curriculum design, attendance team processes, school improvement planning, and hiring practices.

At the same time, the pilot documented significant constraints, including initiative fatigue, staff turnover, uneven diffusion beyond the implementation cohort, and inconsistent embedding of an equity lens. Competing initiatives further constrained educators' time and attention. These challenges align with established implementation research demonstrating the fragility of early-stage reform when organizational infrastructure is still developing (Fixsen et al., 2005). Implementation scholarship further emphasizes that sustainment represents a distinct phase influenced by outer context pressures, resource shifts, and policy environments (Aarons et al., 2011).

By spring 2019, both schools had developed sustainability plans guided by trauma-informed principles and supported by an environmental assessment tool. These plans aimed to integrate trauma-informed approaches into existing initiatives and established structures, not to maintain them as standalone programs. The sustainability planning process assumed relative environmental stability.

1.2. COVID-19 and the Educational Landscape

Then came the COVID-19 pandemic, a collective trauma experience that dramatically altered the educational landscape worldwide. When the pandemic arrived, the pilot study's work functioned as a durability test. Schools across the nation abruptly shifted to remote learning; social distancing measures disrupted traditional support systems; and students, families, and educators faced unprecedented stressors. The pandemic not only created new trauma exposures but also changed how schools responded to trauma manifestations as they permeated social and school contexts.

For the schools that had participated in the ODE TIP Pilot Study, the pandemic represented both a challenge to their implementation efforts and a test of whether trauma-informed practices could persist or prove especially valuable during a period of significant disruption. This study does not re-examine and re-evaluate the original pilot itself, which has been thoroughly documented in ODE's final evaluation report (ODE, 2019). Rather, it examines how trauma-informed practices were understood, sustained, adapted, or discontinued following the conclusion of the initiative and through the pandemic period. By examining these questions within the context of post-pandemic stress, this study identifies mechanisms and conditions that influence long-term durability. The focus is on participant meaning making and the mechanisms shaping long-term durability, not institutional effectiveness or fidelity. This study specifically examines what becomes of trauma-informed reform after structured implementation supports dissolve and as schools operate under sustained systemic stress, extending implementation science beyond initial adoption into durability during a period of disruption.

1.2.1. Conceptual Framing: Sustainability Under Disruption

Implementation science distinguishes between the processes of adoption and sustainability. Initial implementation mechanisms often rely on structured training, coordinated support, and defined expectations. Sustainability, in contrast, requires integration into organizational routines, leadership practices, professional culture, and decision-making structures once formal supports end. Foundational implementation research emphasizes that programs frequently falter not because the intervention itself is ineffective, but because the organizational drivers and infrastructure necessary to sustain change are insufficiently developed (Fixsen et al., 2005). Continuation is therefore neither automatic nor guaranteed, but shaped by context, capacity, and adaptation over time.

The COVID-19 pandemic created a rare analytic condition in which sustainability could be observed under systemic stress. A reform effort implemented prior to the pandemic and then carried into a period of collective disruption offers a distinct opportunity to examine durability beyond early enthusiasm and structured guidance. The ODE's Trauma-Informed Practices Pilot Study provides a historically and organizationally situated context in which to examine this question. This study is grounded in that distinction. It asks not only whether trauma-informed practices were adopted, but what became of them when conditions shifted and external scaffolding dissolved.

1.3. Problem Statement

The COVID-19 pandemic significantly increased the prevalence and intensity of trauma exposure among school-aged children, contributing to worsening mental health, heightened stress, and substantial disruptions to learning. National data indicate that more than one third of high school students reported poor mental health during the pandemic and nearly half reported

persistent feelings of sadness or hopelessness, with close to one in five seriously considering suicide (Jones et. al, 2022). These mental health challenges occurred alongside increased exposure to adversity at home, including emotional abuse, physical abuse, and widespread parental job loss. Six years after the onset of the pandemic, schools across the United States continue to experience elevated levels of chronic absenteeism, behavioral challenges, and student mental health concerns (U.S. Department of Education, 2024).

Although research on the implementation of trauma-informed practices in educational settings has expanded, significantly less is known about their sustainability over time, particularly through periods of systemic disruption. A critical gap exists in understanding how trauma-informed initiatives adapt when external supports end and when schools face significant environmental stressors such as the pandemic. Existing literature largely focuses on early implementation phases, educator perceptions, and pre-pandemic challenges, leaving unanswered questions about which trauma-informed practices persist, which fade, which evolve, and why (Aarons et al., 2011; Fixsen et al., 2005). For schools that had adopted trauma-informed practices prior to the pandemic, these conditions raise essential questions about the resilience, adaptability, and long-term sustainability of their implementation efforts.

Moreover, while research documents educator resistance, concerns, and learning during implementation, there is limited evidence regarding how educator perceptions and practices shift in response to collective trauma experiences that affect both students and staff simultaneously. The two high schools that participated in ODE's TIP Pilot Study offer a unique opportunity to examine these questions. Having received intensive training, coaching, and structured implementation support, these sites represent a well-defined implementation history from which to explore, post-implementation trajectories. With the sudden and profound disruption caused by

the COVID-19 pandemic, these schools experienced conditions that tested the durability of earlier trauma-informed efforts and thus can reveal how trauma-informed practices function under sustained stress.

This gap in long-term research has meaningful implications for educational policy and practice (Bryk et al., 2015; Fullan, 2007). Without understanding the factors that support or hinder the continuation of trauma-informed work, schools risk investing substantial resources into initiatives that dissolve once funding, coordination, or administrative support ends (Scheirer & Dearing, 2011; Wiltsey Stirman et al., 2012). The study does not treat schools as unified organizational cases; it examines the diverse, role-based perspectives of individuals who participated in or were connected to the TIP Pilot Study. These participants offer firsthand insight into how trauma-informed practices were understood, interpreted, sustained, adapted, or abandoned across different phases of the implementation cycle, including the post-pilot period.

1.4. Purpose of the Study

The purpose of this study is to examine the long-term effects of trauma-informed practices as understood by individuals connected to two Oregon high schools that participated in the state's 2016–2019 Trauma-Informed Practices (TIP) Pilot Study. The research centered on the lived, role-based experiences of individuals involved in or connected to the pilot, including school-based instructional practitioners, school-based implementation participants, school-based leadership participants, state-level policy participants, external research participants, and community and intermediary organization participants. By foregrounding participant meaning making, the study explores how trauma-informed practices were interpreted, sustained, adapted, or discontinued over time, especially as the conditions that shaped their enactment changed following the conclusion of the pilot and throughout the disruption of the COVID-19 pandemic.

The study seeks to understand what occurred after comprehensive implementation support ended and when the training, structures, and expectations established during the pilot were no longer present in the same organized form. In particular, the research investigated whether trauma-informed practices continued to exist in meaningful and functional ways once formal support dissipated, and if so, how these practices evolved, shifted, or were reframed in response to new needs, competing demands, and unprecedented levels of collective trauma experienced by students and staff. By gathering the perspectives of individuals who had participated in the original implementation, as well as those who joined the school communities after the pilot but still experienced its residual influence, the study traces what endured, what changed, and what gradually disappeared over time.

The research also aims to illuminate the systemic, contextual, and relational factors that supported or hindered the sustainability of trauma-informed approaches. The study seeks to understand both the structural dimensions of sustainability and the sensemaking processes through which individuals decided what to continue, what to adjust, and what to let go as conditions shifted. A central purpose of the study was to generate insight into the broader question of whether trauma-informed practices could remain viable and meaningful within schools once the external infrastructure that supported their initial implementation was no longer present. The study examined how participants understood the usefulness, relevance, and feasibility of trauma-informed strategies during periods of relative stability and during periods of profound disruption.

In doing so, the research provides a nuanced analysis of the ways in which trauma-informed practices became woven into everyday routines, were reshaped into more accessible and values aligned forms, or faded. Ultimately, the purpose of this study is to contribute practical

guidance for educational leaders, policymakers, and systems-level decision makers who seek to build trauma-informed school environments capable of withstanding real world challenges including turnover, shifting political climates, inconsistent funding, and large-scale crises. By identifying both successful implementation strategies and persistent barriers reflected across participant accounts, the study aimed to support the development of trauma responsive practices that are coherent, sustainable, and resilient over time.

1.4.1. Research Question

This study was guided by one central research question:

What happens after a school becomes trauma-informed?

To advance this central question in interview design and analysis, the study was guided by three sensitizing concepts: (1) What conditions allowed trauma-informed practices to persist when formal structures disappeared? (2) What proved durable under crisis? And (3) What gets lost when initiatives end? Together, these questions supported a role-based analysis of persistence, disappearance, and adaptation across the pilot period, post-pilot years, and the COVID-19 pandemic. (See Appendices A and B for the interview protocols.)

CHAPTER II

2. LITERATURE REVIEW

This chapter grounds the study in trauma prevalence and historical and theoretical foundations before synthesizing four bodies of literature that inform the conceptual framing of the study. First, research on trauma and neurobiological development establishes how trauma exposure influences learning, behavior, and emotional regulation in school contexts. Second, literature on trauma-informed educational practices describes how schools operationalize trauma awareness through relational, environmental, and organizational strategies. Third, implementation science research examines how complex reforms are adopted, diffused, and sustained within organizational systems. Finally, literature examining educational disruption and collective trauma, particularly during the COVID-19 pandemic, provides a contextual lens through which the durability of trauma-informed reforms can be interpreted. Together, these four areas provide the conceptual grounding necessary to interpret participant accounts of sustainability, adaptation, and discontinuation following the Oregon Trauma-Informed Practices Pilot Study.

2.1. Trauma Prevalence and Sequelae

Children bring their lived experiences into schools, including experiences of adversity, loss, instability, and trauma. Schools, therefore, occupy a dual and consequential role: they can unintentionally exacerbate trauma through rigid structures, punitive responses, and misinterpretation of stress responses, or they can function as stabilizing environments that promote safety, regulation, connection, and re-engagement with learning (Crosby, 2015; Overstreet & Chafouleas, 2016). This tension positions schools not only as sites of academic instruction, but as institutional contexts that powerfully shape how trauma is experienced,

interpreted, and responded to in children's daily lives. Understanding the prevalence and impact of childhood trauma is therefore not an abstract epidemiological concern, but a foundational educational problem with direct implications for how learning environments are designed, organized, and enacted.

The prevalence of childhood trauma and its profound impact on learning, behavior, and overall well-being have been widely documented across disciplines and increasingly recognized as critical concerns in educational settings. Research indicates that approximately two-thirds of children experience at least one Adverse Childhood Experience (ACE) before age 16 (Felitti et al., 1998; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). Early ACE research documented strong associations between childhood adversity and later health, behavioral, and social risks (Felitti et al., 1998), while subsequent scholarship has linked cumulative adversity to academic challenges, mental health vulnerabilities, and increased involvement with justice systems across the life course (Perfect et al., 2016).

Within educational research, these findings have contributed to growing recognition that trauma exposure can significantly shape students' engagement with learning environments, influencing not only academic performance, but also behavior, relationships, and responsiveness to instructional and disciplinary practices (Crosby et al., 2020; Hoover & Bostic, 2021). Trauma-related stress responses may manifest in classrooms as patterns of dysregulation, withdrawal, hypervigilance, aggression, or disengagement. These subsequent behaviors are frequently misunderstood within traditional school frameworks (Overstreet & Chafouleas, 2016; Perry & Hambrick, 2008). The pervasiveness of these responses signals that trauma is not an exceptional condition affecting a small subset of students, but a structural feature of contemporary schooling.

Despite widespread identification of trauma and its educational sequelae, evidence-based interventions often fail to reach all students due to persistent gaps between research and practice. Implementation science identifies this research-to-practice gap as a longstanding challenge, particularly in educational contexts where educators must navigate competing initiatives, limited time, and constrained resources (Lyon & Bruns, 2019; Lyon et al., 2024). The literature consistently demonstrates that training alone is insufficient to ensure consistent use of evidence-based practices, and that implementation outcomes are shaped by organizational supports, leadership, and contextual fit (Fixsen et al., 2005; Wiltsey Stirman et al., 2012).

High rates of trauma exposure among school-age children reflect not only individual and familial adversity, but also broader structural and environmental stressors. Structural inequities including housing instability, intergenerational poverty, racial and cultural marginalization, community violence, and rural isolation compound the effects of trauma and limit access to protective supports and behavioral health services (SAMHSA, 2014; Shonkoff et al., 2012).

2.2. Documented Impacts of Trauma on Educational Outcomes

Neurobiological and developmental research provides clear evidence that trauma exposure disrupts core processes underlying learning, behavior, and adaptation in school settings. Neurological research indicates that trauma significantly disrupts normative brain development, especially in regions responsible for executive functioning, emotional regulation, and memory (van der Kolk, 2014). Trauma researchers have documented the effects of chronic adversity on cognitive functioning, including impairments in attention processes and emotional self-regulation that can compromise academic performance and behavioral adaptation (Perfect et al., 2016).

The multidimensional impact of trauma manifests through cognitive impairments, behavioral challenges, and social-emotional disruptions that frequently appear in the public

school setting as academic underperformance, mental health diagnoses, special education referrals, disparities in attendance and engagement, and disproportionate disciplinary actions (Crosby et al., 2020). Research by Perfect et al. (2016) further demonstrates that trauma exposure is significantly associated with decreased IQ scores, lower reading achievement, and increased absences among school-aged children. The layered effects of trauma negatively impacting children's cognitive, social-emotional, and physiological development require comprehensive and inclusive attention.

Children affected by trauma may exhibit patterns of dysregulation that interfere with attention, engagement, and relational functioning in classrooms. These behaviors are often misinterpreted as oppositional or apathetic, not as adaptive responses to perceived threat. The result often becomes a referral to special education services, frequent disciplinary referrals, and support not positioned to heal and respond, and obtain assistance from others outside of the child's classroom teacher. School staff are in ideal positions to recognize the causal link between behavioral and/or academic difficulties and potential trauma exposure due to their daily interactions and trusted relationships (Bell et al., 2013). This position, however, is also a structural demand. It places educators at the intersection of unmet behavioral health needs and school accountability pressures, a tension that becomes central when considering sustainment under conditions of workforce instability and constrained external supports.

2.3. Historical Development and Foundational Principles of Trauma-Informed Practices

Originally utilized in health care settings, trauma-informed practices create conditions of emotional and physical safety, empowerment, collaboration, and cultural responsiveness that allow all students, particularly those affected by trauma, to thrive (Harris & Fallot, 2001a; SAMHSA, 2014). Being trauma-informed means acknowledging the connection between what

we experience and how it is manifested in our bodies, our subsequent experiences, interactions, and ultimately, our choices (van der Kolk, 2014).

Harris and Fallot's (2001b) seminal work identified five core principles that have become foundational to TIP implementation: safety, trustworthiness, choice, collaboration, and empowerment. These principles translate into educational contexts emphasizing the creation of environments where students feel physically and emotionally secure, the development of consistent and transparent practices by educators, opportunities that foster student voice and agency, and collaborative relationships between educators and students (Cole et al., 2018). The Substance Abuse and Mental Health Service Administration's (SAMHSA, 2014) expanded framework added cultural, historical, and gender considerations to these core elements, acknowledging that trauma exists within sociopolitical contexts.

Although much of the existing research examines schoolwide systems and implementation structures, this study centered on the role-based perspectives of individuals connected to these systems, and this chapter foregrounds participant-focused design throughout. I use the literature here not only to summarize what is known, but to build a conceptual frame capable of holding role-differentiated accounts of adoption, adaptation, and sustainment as interpretive work beyond simple organizational outputs.

Within this study, trauma-informed practices (TIP) are understood as schoolwide approaches that recognize the prevalence and impact of trauma while structuring educational environments to promote safety, relational trust, emotional regulation, and student agency (SAMHSA, 2014). These practices typically include staff training on trauma awareness, classroom strategies that support student regulation and belonging, revisions to disciplinary approaches, environmental and sensory supports, and partnerships with families and community

services (Overstreet & Chafouleas, 2016; SAMHSA, 2014). Importantly, TIP in this dissertation is conceptualized, not as a discrete intervention program, but as an organizational orientation that can be interpreted, adapted, and embedded differently across roles and contexts.

2.4. Core Theoretical Foundations

Experiencing trauma, regardless of its perceived severity and effect, has profound and lasting effects on neurobiological functioning, psychological well-being, learning, behavior, and emotional regulation (Perry & Szalavitz, 2017; van der Kolk, 2014). Trauma is broadly defined as an individual's unique experience of harm and/or threat, and may affect a person physically, mentally, developmentally, and/or residually over time (SAMHSA, 2014). Importantly, trauma is neither uniform nor episodic; its effects may accumulate and surface across contexts and developmental periods, directly influencing how students engage with learning environments.

Trauma-informed practices (TIP) emerged from this body of research not as clinical treatments aimed at identifying or resolving specific traumatic experiences, but as systems-level approaches designed to create environments that recognize the prevalence of trauma and actively minimize re-traumatization. TIP emphasizes organizational routines, relational practices, and environmental conditions that promote safety, regulation, trust, and agency for all students. In educational settings, the goal of trauma-informed practice is therefore not trauma treatment, but the construction of learning environments that are responsive to trauma's widespread and uneven effects.

While trauma theory explains why trauma-responsive environments are necessary, implementation science provides a framework for understanding why such reforms are difficult to enact and even more difficult to sustain in real-world school settings. Implementation science is grounded in repeated empirical observations that evidence-based practices are often adopted

inconsistently, delivered with variable fidelity, and discontinued over time once initial supports dissipate (Fixsen et al., 2005; Lyon et al., 2024). In educational contexts, this literature emphasizes that effective implementation depends not only on the quality of an intervention, but on the organizational, relational, and contextual conditions under which it is introduced and maintained.

Lyon and colleagues (2024) describe implementation science as a field founded on systematic attention to gaps between what is known to work and what is routinely delivered in practice, particularly within complex service settings such as schools. This perspective provides a lens to understand how trauma-informed practices are delivered in schools, and why intended practices may diverge from enacted practice. Their work highlights that adoption, fidelity, and sustainment are not automatic consequences of training or policy endorsement, but outcomes shaped by leadership, professional learning structures, implementation supports, and ongoing sense-making by practitioners. This perspective underscores the importance of attending not only to trauma-informed content, but also to the strategies and infrastructures that support effective delivery, adaptation, and sustainment over time.

Scholarship on organizational change and educational reform further demonstrates that implementation is not a purely technical process, but one deeply shaped by interpretation and sensemaking. Weick's (1995) theory of organizational sensemaking explains how individuals construct meaning under conditions of ambiguity, uncertainty, and disruption. In this view, organizational actors interpret new initiatives through cues filtered by their professional roles, prior experiences, and local contexts. Applying this framework to education, Spillane et al. (2002) show that policy implementation is mediated by how educators understand reforms in relation to their instructional responsibilities, resulting in patterned variation within the same

organization. In this literature, “patterned” does not imply uniformity, but recurring, non-random regularities shaped by role, context and interpretation. Similarly, Coburn’s (2001) work on instructional reform demonstrates that sustainability depends not only on initial adoption, but on whether practices become meaningful, legitimate, and integrated across roles over time.

Together, these bodies of work conceptualize implementation and sustainment as socially negotiated processes. They suggest that what counts as “evidence,” “fidelity,” or a practice “working” is not universally defined but interpreted differently by individuals occupying different positions within the same system. These insights align closely with implementation science research on sustainability, which highlights that long-term continuation of practices is shaped by organizational culture, leadership stability, and practitioner interpretation as central influences on the long-term continuation of practices (Aarons et al., 2011; Wiltsey Stirman et al., 2012).

Research on implementation sustainment further emphasizes that interventions often evolve as practitioners adapt to fit changing conditions, resource constraints, and local needs (Chambers et al., 2013). From this perspective, sustainment is less a matter of rigid fidelity than of ongoing negotiation between an intervention’s core functions and the realities of practice. Diffusion theory has long recognized this dynamic. Rogers (2003) introduced the concept of reinvention to describe how users modify innovations during adoption to better align with local contexts. Reinvention does not signal failure; it reflects active sensemaking and contextual responsiveness.

Implementation science has further distinguished between maladaptive drift and purposeful adaptation that preserves core functions while altering form (Chambers et al., 2013; Wiltsey Stirman et al., 2012). From this perspective, sustainability is not defined by static

replication, but by the capacity of practices to be reinterpreted and reshaped over time while maintaining perceived relevance and utility. Reinvention thus becomes a potential mechanism of durability, particularly in complex and unstable environments such as schools operating amid policy shifts, staffing turnover, and external disruption.

Trauma science provides the neurobiological grounding necessary to understand why trauma-informed practices appear intuitive in principle yet remain difficult to sustain. van der Kolk (2014) demonstrates that trauma exposure disrupts neurobiological systems governing stress response, executive functioning, and emotional regulation. These disruptions often manifest in educational settings as behaviors interpreted as defiance, disengagement, or apathy obscuring their origins as physiological adaptations to perceived threat (Perry & Hambrick, 2008). Polyvagal theory further clarifies how patterns of hyperarousal and hypoarousal influence cognitive processing and social engagement (Porges, 2011). From a trauma-informed pedagogical perspective, behavior is reframed as a stress response, orienting educators toward regulation, relational safety, and attunement in their responses (Bath, 2008).

Understanding trauma-informed practice also requires grounding in resilience theory, which emphasizes the protective factors and adaptive capacities that support recovery and growth following adversity (Masten, 2014). From this perspective, schools function not only as sites of academic instruction, but as developmental systems capable of cultivating resilience through stability, secure relationships, and predictable routines. This neurobiological and resilience-informed grounding helps explain both the value of trauma-responsive environments and the structural demands involved in sustaining them over time.

Finally, an ecological perspective situates trauma and reform implementation within broader sociopolitical and geographic contexts. Trauma is shaped not only by individual

experiences, but by systemic factors including institutional racism, poverty, historical oppression, and geographic isolation (SAMHSA, 2014). An ecological lens underscores that trauma-informed approaches must attend to these structural conditions if they are to operate equitably and sustainably. In Oregon, this perspective is particularly salient given pronounced urban–rural disparities, workforce shortages, and regional variation in access to behavioral health infrastructure, all of which influence what "sustainment" can realistically mean across districts.

Taken together, trauma science, resilience theory, implementation science, organizational sensemaking, and ecological perspectives provide a multi-level framework for understanding trauma-informed reform in educational settings. Trauma theory explains the developmental and neurobiological mechanisms through which adversity affects learning and behavior; implementation science illuminates how reforms are adopted, adapted, and sustained within organizational systems; sensemaking scholarship foregrounds the interpretive work of actors across roles; and ecological perspectives situate these processes within broader structural conditions. Together, these frameworks position trauma-informed education not as a discrete intervention, but as a systemic approach whose durability depends on alignment across developmental, organizational, and contextual levels.

2.5. TIP Framework: Key Components and Implementation Strategies

The TIP framework advocates for creating educational environments characterized by predictability, structure, and emotional safety for all students, achieved through universal routines, sensory-supportive spaces, and strong teacher-student relationships. Research exploring school efforts to implement academic, behavioral, and health supports for students has repeatedly demonstrated that discrete programs designed to address specific student needs must be supported by universal, schoolwide shifts in culture and practice to be sustained and effective

(Fixsen et al., 2005; Harris & Fallot, 2001b; Harper & Temkin, 2019; McIntosh et al., 2016). Harper and Temkin's (2019) policy brief emphasize the need for supportive learning environments to be embedded schoolwide, ensuring safety, trust, collaboration, and student empowerment. McIntosh and colleagues' (2016) longitudinal study of Student Wide Positive Behavior Intervention Systems (SWPBIS) positions that durability is strongly associated with system-level commitment and universal practices not isolated add-ons.

Together, these findings highlight that universal, schoolwide transformations in school culture and practice are essential to support targeted programs effectively, and to ensure their sustainability and equitable impact. "Implementation science has grown considerably in school mental health over the past decade, driven by the persistent gaps between knowledge about 'what works' to promote student well-being and what is typically delivered in schools" (Lyon et al., 2024, p. 1013). Ongoing professional development and coaching are essential to ensure evidence-based practices are delivered with fidelity, sustained over time, and adapted to local context (Lyon et al., 2024).

Harper and Temkin (2019) caution that not all children exposed to adversity experience traumatic stress and that broad efforts to identify students with a history of adverse childhood experiences can stigmatize, alienate, and unnecessarily harm students. This is one reason TIP is frequently recommended as school-wide orientations that shape how learning environments are structures and relationships are enacted, rather than being positioned as supplemental services targeted to specific students or delivered by select staff.

Many trauma-informed frameworks emphasize supports for emotional awareness and regulation strategies that are available to all students. One widely used school-based framework is *The Zones of Regulation*, which provides a structured approach for helping students identify

and communicate emotional states (Kuypers, 2011). Neurodevelopment models have also informed trauma-informed educational approaches. The Neurosequential Model of Therapeutics emphasizes that stress and trauma affect brain development and learning readiness broadly, not as conditions limited to a discrete subgroup of students (Perry & Hambrick, 2008). Because trauma-related stress can shape attention, regulation, and engagement across student populations, many trauma-informed frameworks emphasize universal features of school environments, such as predictable routines, relational safety, and supports for emotional regulation, instead of relying exclusively on targeted or specialized interventions.

Within the trauma-informed and implementation science literature, this universal orientation is most often justified on equity grounds, particularly as a response to the widespread and uneven distribution of trauma exposure across student populations. An additional, though less frequently articulated implication of this framing concerns sustainability. When practices are embedded as routine and normative elements of daily schooling, they may be less vulnerable to attrition, staff turnover, and program drift than practices positioned as supplemental programs or discretionary add-ons (Coburn, 2001; Wiltsey Stirman et al., 2012). This is because routinized practices are more readily integrated into existing roles, expectations, and organizational processing, reducing dependence on ongoing authorization, specialized staffing, or external funding streams.

This conceptual linkage does not assume that universal design ensures equitable outcomes. Rather, it suggests that universal approaches may alter the organizational conditions under which equity-oriented practices are maintained over time, particularly in educational contexts characterized by staffing instability, leadership turnover and shifting school, district, and state policy priorities.

Educational change scholarship has long emphasized that reforms are not adopted into neutral organizational spaces, but must contend with the historically sedimented structures, routines, and norms of schooling. Tyack and Cuban's (1995) concept of the grammar of schooling describes that deeply entrenched institutional patterns such as age-graded classrooms, fixed schedules, role expectations, and customary instructional practices which all shape reforms, are perceived as feasible, legitimate, or sustainable within schools. Reforms that conflict with this will often face resistance, symbolic compliance, or absorption without substantive change, whereas reforms that align with existing structures are more likely to persist.

This perspective complements implementation science research on sustainability by foregrounding institutional compatibility as a condition of endurance. While implementation science specifies the drivers, stages and supports associated with adoption and sustainment, the grammar of schooling directs attention to the structural and cultural contours within which reforms must be assimilated. These literatures suggest that long-term sustainability depends not only on training, leadership, or funding, but also on whether practices can be enacted within the ordinary organizational rhythms of schooling as opposed to requiring exceptional structures or continual external intervention.

2.6. Multi-Tiered Implementation and Professional Development

Successful implementation of TIP requires ongoing, comprehensive professional development for all teachers and staff. To reduce the negative effects of trauma, educators must develop a sophisticated understanding of trauma responses and recognize the nuanced manifestations of fight, flight, and freeze responses. This requires developing advanced interpersonal skills, emotional intelligence, and a deep commitment to responsive, empathetic pedagogical practices (Perry & Szalavitz, 2017). Current evidence confirms that fidelity to TIP

requires ongoing professional development, leadership buy-in, embedded mental health supports, and regular evaluation.

Professional development can provide a foundation to assist school staff to respond with appropriate strategies to reduce physical and emotional stress and build a trusting environment that supports a student'' sense of belonging. Training programs often focus on recognizing trauma signs, de-escalation techniques, and fostering a trauma-sensitive classroom culture (Overstreet & Chafouleas, 2016). Research demonstrates that single-session trainings alone are insufficient for sustained practice change; ongoing consultation or coaching tailored to implementer needs increases fidelity and long-term effectiveness (Lyon et al., 2022).

Furthermore, pre-service programs do not prepare future educators with the skills necessary to attend and adapt to the growing social-emotional needs and behaviors of current student populations, and veteran teachers are feeling elevated levels of uncertainty when working with and through dysregulated student behaviors. These conditions clarify why "training" often becomes an early adoption driver while "ongoing implementation support" becomes a core sustainment condition. This distinction is not merely definitional. Analytically, it points toward a potential role-based tension that this dissertation examines between those who experience training as 'we did it' and those who experience sustainment as 'we were left without scaffolding.'

2.7. The 2019 Oregon Department of Education Pilot Study

The 2016–2019 TIP pilot study, launched by the Oregon Department of Education (ODE), represented a pioneering attempt to integrate trauma-informed principles into school systems by using two juxtaposed high schools for the study. The TIP pilot was initiated following the passage of House Bill 4002 (2016), which mandated that the ODE and the Chief

Education Office develop a statewide plan to address chronic student absenteeism. The bill allocated $500,000 in the first year, followed by an additional $1 million over the subsequent 2 years, totaling $1.5 million across the 3-year pilot period to fund trauma-informed approaches in schools, emphasizing the need for coordinated efforts involving education, health services, and community resources. The resulting plan, known as *Every Day Matters*, focused on identifying and addressing the root causes of chronic absenteeism and was funded by an additional $1 million in the 2 subsequent years.

The Oregon TIP study was one of the first efforts in the nation to integrate trauma-informed frameworks across a school setting. The pilot study sought to improve absenteeism by identifying root causes and underlying factors through a trauma-informed lens. This approach positioned Oregon as an innovative adopter in trauma-informed educational reform. The initiative targeted schools by embedding trauma-informed strategies into professional development, classroom management, and schoolwide policy, moving beyond reliance on isolated interventions. The pilot aligned with the concept that implementation strategies should be pragmatic, address implementation determinants, and consider the minimal necessary dosage of training and coaching to achieve change (Lyon et al., 2022).

The pilot emphasized cross-sector collaboration, educator training, and data-driven decision-making, principles that align with national implementation science frameworks advocating for multi-tiered, systems-wide change (Fixsen et al., 2019). The original pilot study research design did not include student-level outcome data or baseline measures of equity impacts on students, families, or school communities. Pilot study outcomes were assessed using implementation-focused and process-oriented indicators. These included qualitative interviews with educators, administrators, and implementation cohort members; documentation of

professional development participation and coaching activities; analysis of school policy revisions and procedural changes; and educator self-reports of changes in beliefs awareness, and use of trauma-informed practices. Additional data sources included meeting artifacts, training materials, cohort reflections, and descriptive analyses of communication and diffusion patterns within and beyond implementation teams. Findings emphasized changes in adult learning, professional language, school climate, and organizational routines, with direct measures of student performance and equity outcomes outside the scope of evaluation (ODE, 2019).

The evaluation documented the types of trauma-informed strategies implemented, levels of staff awareness and reported usage, changes in schoolwide communication networks, and the extent to which trauma-informed principles were integrated into leadership practices, professional norms, and policy discourse. Chronic absenteeism was identified as the motivating problem of practice, but the pilot did not conduct experimental or longitudinal analyses linking implementation to attendance outcomes.

2.7.1. Key Findings and Implementation Challenges of the TIP Pilot Study

This dynamic is evident in the outcomes of Oregon's statewide Trauma-Informed Practices Pilot Study. Evaluation of the pilot in 2019 revealed both promise and limitations. The two participating schools reported reductions in discipline incident rates, improved attendance rates, a more positive school climate, and increased educator awareness of trauma. At the same time, the evaluation identified persistent challenges, including inconsistent training attendance, limited follow-through following the conclusion of the pilot period, staff attrition, and insufficient communication channels to disseminate TIP to all staff members. These findings underscore the difficulty of sustaining trauma-informed reforms when professional learning is not accompanied by durable organizational supports and infrastructures. Notably, no published

studies have followed the 2016–2019 original pilot sites to examine how practices persisted, evolved, or diminished through the pandemic and subsequent organizational disruption.

These findings align with Lyon et al.'s (2024) statement that "implementation science is founded on repeated observations that evidence-based practices are inconsistently adopted, delivered with fidelity, and/or sustained over time in 'real-world' delivery settings" (p. 1013). Herrenkohl et al. (2019) note that despite widespread adoption of trauma-informed approaches, there is a dearth of empirical evidence regarding their sustainability beyond initial implementation phases. Similarly, Harper and Temkin (2019) found that "policy and funding structures often support initial implementation but rarely address the conditions necessary for long-term sustainability" (p. 15). Barriers to sustainment of trauma-informed practices in schools mirror the national literature: Context, staff capacity, and leadership support strongly influence the degree to which interventions persist beyond initial implementation (Lyon et al., 2022). Oregon's experience illustrates both the successes and the systemic fragmentation that can arise when scaling complex interventions without sufficient infrastructure or long-term planning.

2.8. Impact of the COVID-19 Pandemic and Collective Trauma

Over the past 5 years, Oregon has been impacted by cascading crises that heighten trauma exposure and strain educational systems. In September 2020, the Labor Day wildfires burned more than 1 million acres across the state, destroyed over 5,000 structures, and displaced thousands of residents, marking one of the most destructive wildfire events in Oregon's recorded history (Oregon Office of Emergency Management [OEM], 2021). In southern Oregon, the Almeda Fire alone damaged or destroyed more than 2,500 residences, resulting in widespread housing displacement and prolonged recovery across multiple school communities (Oregon Housing and Community Services [OHCS], 2022). In addition to direct fire impacts, wildfire

smoke has produced repeated periods of unhealthy air quality across Oregon in recent years, extending health and disruption effects beyond fire perimeters and affecting communities statewide (Oregon Department of Environmental Quality, 2022).

Housing instability has simultaneously intensified across Oregon. Statewide housing reports document escalating affordability challenges, rising homelessness, and increased eviction vulnerability in the post-2020 period, conditions that compound family stress and community instability (OHCS, 2023). Concurrently, Oregon has experienced an escalating substance use disorder crisis, including significant increases in opioid- and fentanyl-related mortality, contributing to family system strain and increasing the likelihood that schools encounter the downstream impacts of parental substance use and unmet behavioral health needs (Oregon Health Authority, 2023). Together, these intersecting stressors create layered and chronic adversity for many children. When unbuffered by stable adult relationships and community support, such cumulative stress can result in toxic stress, a condition shown to impair brain development and contribute to long-term physical, emotional, and behavioral health challenges (Center on the Developing Child at Harvard University, 2016).

The COVID-19 pandemic fundamentally disrupted educational environments while amplifying trauma exposure among students and staff. Hoffman and Miller (2020) documented widespread increases in anxiety, grief, and disconnection among children, particularly in marginalized communities. In Oregon, the pandemic collided with ongoing wildfire recovery, housing instability, and behavioral health system strain, deepening disparities in resource distribution and exposing structural fragilities within rural and low-income districts (OEM, 2021; OHCS, 2023). These conditions necessitated immediate adaptation of trauma-informed strategies and revealed limitations in existing implementation infrastructures. The pandemic operated

within an already stressed ecosystem, intensifying demands on educators and community partners responsible for sustaining trauma-informed practice.

2.9. Educational Disruptions and Adaptations

Educational systems across the United States have increasingly shifted toward proactive approaches that cultivate learning environments promoting empathy, healing, and resilience while avoiding re-traumatization for students and staff (Thomas et al., 2019). These shifts are even more necessary in the post-pandemic landscape, where researchers have documented elevated levels of trauma-related stress, anxiety, and depression among students (Hoover & Bostic, 2021). As Darling-Hammond and Hyler (2020) argue, the COVID-19 pandemic underscored the urgent need to prepare educators to address students' social, emotional, and academic needs through equitable and trauma-informed approaches that foster healing and resilience.

The COVID-19 pandemic disrupted routines and relationships that often serve as stabilizing factors for children. School closures increased social isolation, loss of caregivers, and reduced access to behavioral health services compounded existing inequities, particularly among low-income, rural, and racially marginalized students (ODE, 2022). The shift to remote learning further revealed disparities in access to technology, reliable internet connectivity, and adult support at home, highlighting not only academic gaps but also broader social and emotional vulnerabilities.

Oregon schools faced challenges related to extended closures, digital equity barriers, wildfire recovery, and ongoing community stressors that intensified strain on students and educators. These intersecting conditions resemble what Masten and Motti-Stefanidi (2020) describe as a "cascading disaster," in which multiple, interconnected disruptions compound

trauma exposure and overwhelm support systems simultaneously. Within this context, the relevance of trauma-informed practice frameworks became increasingly pronounced. Educators and school staff frequently functioned as frontline responders to student distress, intensifying calls for comprehensive and systemic support structures (Bell et al., 2013).

2.10. Models of Institutional and Individual Resilience

Early studies of post-pandemic educational recovery identify both challenges and opportunities for trauma-informed practice. Darling-Hammond and Hyler (2020) observe that schools most successful in supporting students through pandemic disruption employed whole-child approaches aligned with trauma-informed principles, including relationship building, flexible expectations, and integration of social-emotional learning. These findings reinforce the centrality of TIP in post-crisis educational recovery.

Emerging research further indicates that educator well-being is a critical factor in the sustainability of trauma-informed practices. Pressley et al. (2021) report elevated levels of burnout, stress, and turnover intention among teachers during the pandemic, underscoring the strain associated with prolonged crisis response. Similarly, research on secondary traumatic stress suggests that educators exposed to students' trauma narratives may experience compassion fatigue, emotional exhaustion, and reduced professional efficacy (Hydon et al., 2015). Together, these findings highlight that sustainable trauma-informed implementation requires attention, not only to student support structures, but also to the relational and emotional conditions of the adult workforce responsible for enacting those practices.

2.11. Oregon Context and Structural Conditions Shaping Trauma-Informed Sustainability

Trauma-informed education in Oregon cannot be understood as a discrete school-based reform. Therefore, it cannot be limited to isolated training or policy endorsements. Professional

development and localized implementation efforts occur within structural conditions that either reinforce or undermine long-term durability (see Table 2.1 below). As such, sustainability is not solely a function of educator commitment or school-level leadership, but of alignment between trauma-informed educational practice and the surrounding systems responsible for crisis stabilization, behavioral health care, funding continuity, and workforce capacity.

2.11.1. Behavioral Health System Infrastructure

Recent state-level findings illuminate significant structural constraints within Oregon's behavioral health crisis system. The Oregon Secretary of State's (2025) performance audit documents fragmentation across crisis response components, inconsistent coordination among agencies, and insufficient funding for key elements of a Crisis Now-oriented model. While the state established a dedicated telecommunications fee to fund the 988-crisis hotline, the audit reports limited or absent funding for crisis stabilization centers and constrained funding for mobile crisis services. In effect, portions of the crisis' continuum remain partially implemented or under-resourced.

The audit further documents longstanding data fragmentation, noting that integrated behavioral health data systems have been delayed for more than two decades. This fragmentation limits cross-system planning, obscures service utilization patterns, and constrains long-term evaluation. For schools attempting to sustain trauma-informed approaches, the absence of coordinated stabilization pathways places additional pressure on internal personnel and reduces the reliability of external referral systems, limiting continuity of support for students.

2.11.2. Youth Mental Health Indicators

Structural constraints are compounded by elevated indicators of student behavioral health needs. According to the Oregon Secretary of State (2025), 14.6% of Oregon 11th-grade students

in 2022 reported serious thoughts of suicide, with similarly concerning rates reported among 8th and 6th graders. These figures situate trauma-informed educational work within a context of significant mental health vulnerability. They are not isolated data points, but indicators of the level of need present in school communities.

In rural and remote counties, recruitment, and retention challenges within Community Mental Health Programs further limit access to outpatient care, crisis stabilization, and ongoing therapeutic services. As a result, schools frequently function as *de facto* access points for behavioral health support, even when they lack the external infrastructure necessary for sustainable cross-system coordination.

2.11.3. Funding Stability and Workforce Capacity

Funding instability compounds these pressures. Although Oregon has secured ongoing funding for 988 call infrastructure, the audit describes uncertainty surrounding reimbursement mechanisms for mobile crisis response and stabilization services, as well as administrative complexities that complicate long-term system planning. Workforce shortages across behavioral health agencies, alongside leadership turnover within state health authorities, weaken cross-agency continuity and strain service delivery capacity. Sustainability of trauma-informed educational initiatives, therefore, depends not only on internal school practices, but also on the reliability of external funding streams and workforce stability within the broader behavioral health system.

Table 2.1 summarizes key state-level structural conditions identified in the Oregon Secretary of State's (2025) audit and illustrates how these conditions shape the sustainability of trauma-informed educational practices in Oregon.

Table 2.1

State-Level Structural Conditions Affecting Trauma-Informed Practice Sustainability in Oregon

Structural Domain	Audit Finding (Oregon Secretary of State, 2025)	Relevance to Trauma-Informed Educational Sustainability
Crisis Infrastructure	Partial implementation of national Crisis Now framework; stabilization centers lack dedicated funding	Schools cannot rely on consistent community stabilization pathways, increasing pressure on internal supports
Funding Stability	Dedicated funding for 988 hotline; inconsistent or absent funding for stabilization services; uncertain Medicaid reimbursement beyond 2027	Sustainability of trauma-informed practices depends on parallel funding streams that extend beyond pilot periods
Rural Disparities	Higher suicide rates in rural and remote counties; staffing shortages in Community Mental Health Programs	Rural schools face disproportionate barriers to sustaining TIP due to limited access to behavioral health partners
Youth Behavioral Health	Oregon youth report highest rate of serious thoughts of suicide nationally; limited dedicated children's crisis staffing	Trauma-informed initiatives in schools must operate amid elevated youth need and uneven youth-focused infrastructure
Data Systems	Over 20 years of fragmented data systems; delayed implementation of integrated behavioral health data platforms	Lack of statewide data alignment limits evaluation of TIP sustainability and cross-system coordination
Workforce Capacity	Chronic behavioral health staffing shortages; leadership turnover within Oregon Health Authority	Workforce instability weakens long-term continuity necessary to sustain trauma-informed reform

2.11.4. Education Policy and Variability of Adoption

Education policy structures introduce an additional layer of variability. The Oregon Legislature funded the original TIP pilot through House Bill 4002 (2016), and subsequent investments under the Student Success Act (2019) encourage integrated supports and mental

health investments within districts. However, Oregon has not established a formal statewide mandate requiring comprehensive trauma-informed implementation across districts. Nor has it embedded a standardized trauma-informed framework within statewide curriculum standards or disciplinary codes. Consequently, trauma-informed adoption remains largely discretionary at the district level. Implementation scope, fidelity, and sustainability vary based on leadership continuity, district capacity, local political priorities, and competing reform initiatives. This variability reflects not a lack of interest, but a structural absence of statewide codification.

2.12. Structural Ecosystem and Sustainability Implications

These conditions position trauma-informed education in Oregon within a behavioral health ecosystem characterized by partial crisis continuum implementation, persistent data fragmentation, funding variability, workforce shortages, rural service disparities, and policy discretion, rather than a fully integrated statewide mandate. Schools may achieve elevated levels of fidelity during time-limited pilot periods supported by external coordination, local champions, and funding; however, long-term sustainability depends on whether school-level practices are structurally reinforced by reliable cross-agency infrastructure.

This dissertation does not treat these macro-conditions as an abstract background. It examines how individuals connected to the TIP pilot sites interpret and experience these structural dynamics, and how such conditions enter sustainability narratives as constraints, rationales, boundary conditions, or catalysts for adaptation (see Table 2.2 below).

To clarify how this study addresses documented gaps, Table 2.2 synthesizes key areas of the trauma-informed literature and situates how the present study examines structural conditions, constraints, boundary conditions, and catalysts for sustainability and adaptation.

Table 2.2

Adoption Drivers and Sustainment Conditions in Trauma-Informed Implementation

Domain	Adoption Drivers	Sustainment Conditions
Professional Development	Initial training sessions	Ongoing coaching and embedded support
Leadership	Vision alignment and pilot enthusiasm	Leadership stability and continuity
Funding	Time-limited pilot allocations	Recurring structural funding streams
Policy Alignment	Initial endorsement	Institutional embedding in policy and practice
Data Use	Baseline evaluation	Integrated longitudinal and cross-system data capacity
Organizational Culture	Awareness of trauma impacts	Norm internalization and cultural legitimacy
External Infrastructure	Access to community partners	Stable behavioral health ecosystem and workforce capacity

Ginwright's (2018) concept of healing-centered engagement extends beyond trauma-informed care to emphasize cultural assets, collective wellbeing, and political awareness, reframing trauma work as not only addressing harm but building collective capacity and addressing systemic causes. This perspective confirms that sustainable TIP implementation must incorporate equity-centered approaches that acknowledge individual and collective dimensions of trauma and healing. Critics note that existing TIP implementation models often inadequately address systemic factors that generate and sustain trauma. Venet (2019) argues that equity-centered trauma-informed education approaches require extending beyond individual classrooms

to interrogate and reform disciplinary policies, resource allocation distribution, and institutional practices that disproportionately harm marginalized students.

In this dissertation, equity is not positioned as an optional extension of TIP. It is positioned as a condition of legitimacy that shapes whether trauma-informed practices become culturally embedded or remain procedural. Sustainability without equity risks endurance without trust, routinization without relational safety, and implementation "success" narratives that conceal differential impacts across student groups and staff roles.

2.13. Critical Perspectives and Equity Considerations

Recent research critically examines mainstream trauma-informed approaches for insufficient attention to racial equity and cultural context. Davis et al. (2022) argue that dominant TIP frameworks often neglect the racialized nature of trauma, particularly the impacts of structural racism, historical trauma, and intergenerational trauma experienced by communities of color. This critique is especially relevant in Oregon where racial disparities in educational outcomes persist despite broad TIP adoption. As Davis et al. (2022) critically observe, "Despite clear evidence of disproportionate trauma exposure among students of color, most models of trauma-informed schools do not explicitly address the intersection of race and trauma within their system-level efforts to help staff realize the prevalence and impact of trauma, recognize signs of trauma exposure, or respond in ways to avoid re-traumatization" (p. 2453). This critique underscores the importance of examining trauma-informed reform not only as an implementation challenge, but also as an equity issue, particularly when sustainment unfolds within systems shaped by enduring structural and racial equities.

2.14. Need for Comprehensive Assessment

The literature lacks longitudinal studies examining how trauma-informed approaches develop over time, particularly following initial implementation periods supported by dedicated funding and external scaffolding. Additionally, research on rural implementation challenges, educator transformation processes, and the integration of equity perspectives within TIP frameworks remains limited. Although national TIP literature continues to grow, substantial gaps remain, particularly in the post-pandemic context. Table 2.3 synthesizes these gaps and positions the present study's contribution within the existing literature. There is a paucity of longitudinal, school-based research that integrates educator preparedness, intergenerational trauma, and the intersecting influences of race, poverty, and geographic isolation in shaping students' trauma experiences, particularly beyond initial implementation and funding periods. While these areas are each represented in adjacent literatures, they are rarely examined together or over extended time horizons.

Table 2.3

Literature Gap Matrix: Identified Gaps in Trauma-Informed Literature and Study Contribution

Area of Literature	Established Knowledge	Identified Gap	Study Contribution
Adoption of TIP	Strong documentation of pilot implementation	Limited evidence on long-term sustainment	Longitudinal, role-based sustainability analysis
Equity Integration	Emerging critique of racialized trauma	Limited system-level embedding research	Integration of critical trauma with implementation science
Rural Contexts	Underrepresented in TIP literature	Limited sustainability research in rural districts	Oregon-specific rural structural analysis
Post-Pandemic Adaptation	Immediate response literature	Few longitudinal post-pandemic sustainability studies	Pandemic analyzed as structural stress test
Educator Well-Being	Recognition of burnout and secondary trauma	Limited linkage to sustainment of TIP	Role-mediated analysis of adult support as sustainment factor

This study directly responds to this gap by examining sustainability and adaptation through participant accounts, not organizational metrics, offering insight into how individuals interpret and carry forward trauma-informed practices under changing conditions. A longitudinal assessment of what happens beyond initial implementation is timely and necessary to identify strengths, inconsistencies, and barriers after foundational practice is established. Such an assessment can inform strategic policy, resource allocation, and the distribution of implementation supports. Such an assessment should also rely on the voices and perspectives of a diverse classification of staff since sustainability is not only a systems property but also a role-mediated experience.

There should also be capacity to examine the influence of educators' own trauma histories on their implementation efficacy, well-being, and pedagogical decisions, all of which are significant yet understudied dimensions of trauma-informed practices literature. The research incorporates principles from critical perspectives on trauma and healing (Ginwright, 2018) and resilience theory (Masten, 2014), emphasizing systemic and individual dimensions of trauma response and recovery. Critical perspectives on trauma and healing center equity considerations and the structural conditions shaping how trauma is distributed, experienced, and responded to within social systems, including schools. In this study, trauma is examined not as an individual psychological condition, but as a contextual force that influences organizational practices, decision-making, and working conditions. Resilience theory is similarly applied at a systems level, illuminating the organizational routines, relational infrastructures, and cultural capacities that support adaptation and continuity following disruption. This study is further grounded in implementation science, which provides analytic tools for examining how evidence-based

practices are adopted, adapted, and sustained within complex educational organizations under changing conditions.

Together, these theoretical frameworks provide analytic lenses for examining how trauma-informed practices evolve over time, how they respond to system disruptions like the pandemic, and how they address or perpetuate existing inequities in educational access and outcomes. The synthesis of neurobiological research, implementation science, critical perspectives, and Oregon-specific structural conditions illuminates the promise and limitations of current approaches. Significant gaps in understanding post-implementation trajectories and post-pandemic adaptations justify this study's focus on what happens after schools become "trauma-informed," a question with profound implications for educational policy, professional development, and student wellbeing. By integrating implementation science with critical perspectives on trauma and equity, and by anchoring conceptual claims in role-differentiated accounts, this study contributes practical and scholarly guidance for specifying the conditions under which TIP becomes durable, adaptive, and legitimate in Oregon and beyond.

CHAPTER III

3. METHODS

3.1. Overview

Despite increased national and state investment in trauma-informed practices, empirical research remains limited regarding the long-term sustainability, evolution, and adaptation of these practices in school settings, particularly across and beyond periods of systemic disruption. In Oregon specifically, little published longitudinal work has examined how trauma-informed practices developed after the conclusion of formal implementation supports or how educators sustained these approaches over time. This study asks a practical research question that remains insufficiently examined in the trauma-informed education literature: What happens after a school becomes trauma-informed? This research study examines participant accounts of practice persistence, reinterpretation, and change approximately 6 years after the conclusion of Oregon's 2016–2019 Trauma-Informed Practices (TIP) Pilot Study.

The study focuses on how individuals connected to the Pilot Study interpret the durability, transformation, and tensions associated with trauma-informed practices over time. This chapter describes the methodological approach used to investigate that question. It details the qualitative design, participant selection and recruitment procedures, data sources, analytic strategy, and steps taken to establish trustworthiness and protect human participants. The analytic stance is interpretive and uses participant narratives to generate insight into school-level elements of TIP in order to understand what happens after a school becomes trauma-informed.

The study is situated within the historical context of two Oregon high schools that participated in the state's 2016–2019 TIP Pilot Study. These schools provide the shared implementation context referenced by participants when describing how trauma-informed

practices developed during the pilot period and how those practices persisted, changed, or diminished after formal implementation supports ended. The study focuses on how individuals connected to the Pilot Study interpret the durability, transformation, and tensions associated with trauma-informed practice across time.

The COVID-19 pandemic provides an additional temporal lens through which these trajectories can be examined. Schools that adopted trauma-informed practices prior to the pandemic subsequently faced prolonged disruption to instructional routines, staffing stability, and student needs. Participant reflections, therefore, span multiple phases, including pre-pilot conditions, the pilot implementation period from 2016 to 2019, the immediate post-pilot transition, the disruption associated with the COVID-19 pandemic, and the present.

By examining participant accounts across these phases, the study investigates how trauma-informed practices are interpreted, sustained, adapted, or abandoned once formal implementation infrastructure recedes. Without a clearer understanding of the mechanisms and conditions that influence sustainability, educational systems may continue investing significant resources in initiatives that struggle to endure beyond the initial implementation phase. This study contributes insight into the longer-term trajectories of trauma-informed educational reform by examining what remained embedded in practice several years after the pilot period concluded and after schools navigated a period of profound systemic disruption.

3.2. Methodology

The study employed a qualitative, interpretive research design informed by implementation science perspectives on adoption, adaptation, and sustainment. The original research plan envisioned a multiple-case, mixed-method design incorporating site observation and quantitative outcome integration. Institutional access constraints required a methodological

pivot to a participant-centered qualitative design anchored in semi-structured interviews and review of publicly available Oregon Department of Education (ODE) documentation. This pivot preserved the study's central analytic aim: to understand how trauma-informed practices persisted, transformed, or diminished once intensive implementation supports concluded and schools navigated the prolonged disruption of the COVID-19 pandemic.

The qualitative design privileges participant interpretation and role-positioned perspectives on implementation and sustainability. Interviews invited participants to reflect across multiple phases of the initiative, including the pilot period (2016–2019), the immediate post-pilot transition, the disruption associated with the COVID-19 pandemic, and the present. Because data were collected at a single point in time, participants' accounts represent retrospective reflections across phases, rather than direct longitudinal observation.

Semi-structured interviewing supported depth and flexibility while aligning with the study's research questions. Document review of publicly available ODE materials served primarily as contextual support, providing background information on the pilot initiative and aiding the identification of potential participants.

The two pilot high schools served as the historical and contextual frame for participant reflections. One site served a rural small-city community, while the other served a metropolitan suburb; however, participants most consistently distinguished the sites based on differences in leadership structure, implementation roles, and organizational arrangements rather than demographic or economic characteristics. These contextual differences provided background conditions referenced by participants when describing implementation pressures, decision-making processes, and sustainability mechanisms. The study does not assign comparative

effectiveness to the sites. Contextual differences are treated descriptively and not analytically. To protect confidentiality, site names and districts are not identified.

3.2.1. Rationale for Qualitative Approach

Qualitative inquiry is well suited to examine how educators interpret and enact trauma-informed practices across time. Public schooling is a relational enterprise in which educators' professional histories intersect daily with students lived experiences. Because trauma-informed practice is enacted through relationships, routines, and professional interpretation, understanding its persistence requires attention to how practitioners describe and make sense of their experiences. Creswell and Poth (2018) note that qualitative research allows investigators to develop a detailed understanding of a phenomenon by engaging directly with participants and examining how they interpret events and experiences. Merriam and Tisdell (2016) similarly emphasize the importance of meaning making in applied educational research.

This study pays particular attention to how participants describe mechanisms that enabled trauma-informed practices to endure, even though the COVID-19 pandemic, as well as to the ways meanings and routines surrounding trauma-informed practice evolved over time.

3.2.2. Positionality and Role of the Researcher

I brought personal and professional experiences related to trauma to this work. As a district-level behavior coach, School Climate Specialist, and later a Dean of Students, I worked closely with students experiencing adversity and distress. I had received training in trauma-informed practices and social-emotional well-being prior to conducting this research. I also had individual experiences with trauma and am a parent of children who have experienced trauma. Earlier in my life, I did not attach the label "trauma" to my own history; professional learning later prompted a reframing of those experiences, a process similar to what Campbell et al. (2010)

describe when participants report altered understanding, meaning-making, and self-reflection through engagement in trauma-related research. In some interviews, I disclosed aspects of my background when appropriate to establish transparency and rapport, consistent with guidance on conducting research on sensitive topics and navigating researcher-participant boundaries (Dickson-Swift et al., 2007; Liamputtong, 2007).

I recognize both the insight and the potential blind spots that can accompany insider research. Charmaz (2014) emphasized the importance of examining how researcher assumptions and positionality shape analysis, while Berger (2015) described the researcher as an interpretive instrument within qualitative inquiry. I approached fieldwork with intentional reflexivity, actively monitoring assumptions, emotional responses, and interpretive decisions throughout the research process. Throughout the study, I maintained analytic memos documenting emerging interpretations, questions, and analytic decisions, following Emerson et al.'s (2011) approach to ethnographic and analytic memo writing. Reflexive memoing allowed me to document evolving interpretations while remaining attentive to alternative explanations. These practices align with approaches to structured reflexivity intended to strengthen qualitative rigor and transparency (Pillow, 2003; Probst, 2015). Together, these strategies were intended to acknowledge both insight and potential bias while keeping participants' perspectives central to the analysis.

3.2.3. Timeframe

Interviews were conducted in October and November 2025, approximately 6 years after Oregon's TIP Pilot Study concluded. This temporal distance enabled participants to reflect retrospectively across multiple phases, including pre-pilot conditions, pilot implementation (2016–2019), post-pilot transition, pandemic disruption, and the present.

3.3. Participant Selection and Recruitment

3.3.1. Sampling Strategy and Pivot

The sampling process for this study required a substantial methodological shift when institutional access to the two pilot high schools was not granted despite repeated attempts over a 6-month period. The original design envisioned recruiting educators, administrators, and staff directly from the two schools, with intentional oversampling of individuals who had participated in the 2016–2019 Trauma-Informed Practices (TIP) Pilot Study and remained in their roles through the pandemic. The denial of access to schools, staff lists, and internal directories necessitated a pivot to criterion-based purposive sampling informed by publicly documented involvement in the TIP Pilot Study.

To protect confidentiality within a small and publicly documented initiative, site and district identifiers were masked throughout the study. Although institutional access to the schools themselves was not granted, the study remained anchored in the historical implementation context of the two pilot sites. This allowed the research to examine how trauma-informed practices evolved after comprehensive implementation supports concluded. At the same time, the shift to participant-centered sampling enabled inquiry into these trajectories without requiring direct access to school facilities, internal staff rosters, or current school personnel.

Because on-site access and current staff rosters were unavailable, participant identification relied on systematic reconstruction of the pilot's implementation network using publicly available documentation. This process began with a complete review of ODE materials referencing the pilot between 2016 and 2019. The primary document was the 91-page 2019 ODE final evaluation report, which was examined to identify individuals referenced in narrative

descriptions, advisory lists, methodology sections, appendices, acknowledgments, and embedded tables (ODE, 2019). These materials served as the initial sampling frame.

To ensure comprehensive identification of individuals connected to the pilot, the search expanded beyond the evaluation report. Additional sources included legislative archives, committee minutes, advisory group membership lists, ODE press releases, public board meeting records, *Every Day Matters* materials, and archived webpages referencing House Bill 4002 (2016). Each source was reviewed for references to individuals who had participated in the design, implementation, coordination, or evaluation of the TIP Pilot Study. Through this process, the broader human ecosystem surrounding the pilot study was reconstructed using dispersed public records.

As this effort continued, I compiled a comprehensive document listing individuals whose names appeared in pilot-related public sources. Each entry included the person's documented role during the pilot period, their district or organizational affiliation at the time, and the context in which they were referenced. The resulting list included approximately 60 individuals across multiple levels and positions, including school-based educators and leaders, implementation coordinators, ODE advisors and researchers, school district administrators, state policy staff, external researchers and evaluators, advisory committee members and community-based organization partners.

The next phase involved identifying current contact information for individuals in the sampling frame. Because 6 to 9 years had passed since their documented involvement, many individuals had changed positions, retired, moved to different districts, transitioned to higher education or consulting roles, or left the field entirely. Current contact information was located through district directories, LinkedIn profiles, professional association listings, conference

programs, research publications, state licensing databases, and organizational staff pages. When names were common or affiliations unclear, contextual information such as district, years of experience, role descriptions, or publications was cross-referenced to verify identity.

I then sent recruitment emails directly to approximately 60 individuals identified through this process (see Appendix C). These emails introduced the study, explained its purpose, described confidentiality protections, and emphasized the voluntary nature of participation. Because recruitment occurred independently of institutional endorsement, all invitations were sent through direct outreach based on publicly documented involvement in the pilot initiative.

Eight individuals ultimately agreed to participate in interviews. Although smaller than the original site-based recruitment plan, the final sample represented diverse institutional roles connected to the implementation ecosystem surrounding the TIP Pilot Study. Participants included individuals connected to classroom practice, school leadership, policy development, program evaluation, and community-based trauma-responsive work. This role diversity allowed me to examine how trauma-informed practices were interpreted across institutional positions as opposed to within a single professional group.

3.3.2. Final Participant Group

The final participant group represented multiple vantage points essential to understanding trauma-informed practice sustainability across time and system levels. Participants were drawn from several sectors connected to the implementation of the Trauma-Informed Practices (TIP) Pilot Study, including school-based practitioners, systems-level policy participants, research and evaluation partners, and community-based organizations. This heterogeneity enabled triangulation across professional roles, phases of the pilot lifecycle, and institutional contexts.

Participants are referenced throughout the study using generalized role descriptors instead of formal titles to preserve confidentiality within a small and publicly documented initiative. The final sample included eight people in the following roles: school-based instructional practitioner, SB-P (n = 1), school-based implementation participant, IC (n = 1), school-based leadership participants, SB-L1 and SB-L2 (n = 2), state-level policy participant, SPD (n = 1), external research participant, ER (n = 1), community organization participant, CO-P (n = 1), and intermediary organization participant CO-A *(*n = 1).

Together, participants provided perspectives spanning multiple phases of the initiative, including early pilot conceptualization, the formal implementation period from 2016 to 2019, the immediate post-pilot transition, the disruption associated with the COVID-19 pandemic, and the present. This temporal range allowed me to reconstruct how trauma-informed practices evolved across nearly a decade of educational change.

Participants also contributed distinct institutional perspectives. School-based practitioners described the day-to-day translation of trauma-informed principles into classroom and building-level practices. School leadership participants reflected on organizational decision-making, staff training structures, and institutional conditions that shaped implementation. Policy participants described how statewide priorities, funding mechanisms, and advisory processes influenced the design and rollout of the pilot initiative. Research and evaluation participants provided insight into the methodological frameworks used to assess the pilot and the limitations of those evaluation approaches. Community and intermediary organization participants contributed perspectives from outside the formal school system, illustrating how trauma-responsive practices develop and persist within community contexts.

This diversity of perspectives enabled the study to identify both converging and divergent interpretations of trauma-informed practice sustainability. Although the sample size was small, the range of institutional roles represented allowed me to examine patterns that emerged across independent perspectives. These layered accounts made it possible to move beyond questions of whether trauma-informed practices persisted and examine the conditions under which such practices were internalized, adapted, or diminished over time.

3.4. Data Collection

Data for this study came from document analysis and semi-structured interviews.

3.4.1. Document Review

I reviewed publicly available documentation referencing the ODE's Trauma-Informed Practices Pilot Study, including the 2019 final evaluation report (ODE, 2019), TIP Pilot Study overview and descriptive materials, policy and legislative documents, and publicly accessible presentations, reports, training materials, meetings, and web-based content from the ODE and other publicly available sources. These materials were used to identify potential participants and to establish contextual reference points for distinguishing pilot-period implementation conditions from subsequent sustainability dynamics.

3.4.2. Semi-Structured Interviews

I conducted one semi-structured interview with each participant. Semi-structured interview protocols were developed for school-based staff and non-school-based stakeholders to capture role-specific perspectives on the implementation, sustainability, and adaptation of Oregon's Trauma-Informed Pilot Study. Full interview protocols, including pre-interview background information used solely to tailor questioning rather than for analytic coding are provided in Appendices A and B. Interviews lasted approximately 60 minutes and were

conducted by secure video conferencing to accommodate geographic distance and scheduling constraints. With participant permission, interviews were audio-recorded and transcribed verbatim. The interview protocol invited reflection across multiple timeframes and professional roles, balancing open prompts with targeted probes related to sustainability, adaptation, and shifts in meaning. Interviewing remained responsive to participants' roles, allowing conversations to follow consequential lines of experience.

3.4.3. Member Checks

Member checking was conducted as a two-phase, rolling process designed to support interpretive credibility and accuracy. During interviews, I frequently paraphrased participant statements and sought confirmation to verify intended meanings in real time. Following each interview, within 48 hours following each interview, I shared individualized summaries and key highlights with participants to confirm accuracy of their accounts. Participants were invited to provide feedback or clarification within 1 week.

After preliminary theme development, approximately 4 months after all interviews were completed, I provided de-identified summaries of emergent themes to all participants and invited comment regarding accuracy, resonance, and completeness. This thematic member checking constituted a second phase of review and was conducted individually via email. Three of the eight participants responded to both rounds of member checking. Participant feedback primarily affirmed thematic accuracy; one participant suggested a minor clarification to analytic language which was incorporated into theme articulation. Another participant asked for further clarification around themes and then confirmed the accuracy. No substantive revisions to thematic structure were requested. Participant feedback informed refinement of interpretive language and thematic boundaries.

3.5. Analytic Framework

The analysis was guided by a codebook developed through iterative engagement with the interview corpus. The analytic codebook guiding this study included the following domains:

- Implementation Process
- Knowledge and Frameworks
- Practices and Strategies
- Outcomes
- Sustainability and Evolution
- COVID-19 Impact
- Equity and Context
- Research and Evaluation

These domains were derived inductively from recurring patterns across interviews and refined through multiple cycles of coding, memoing, and cross-case comparison. The structure also reflected how participants organized their narratives when describing implementation, adaptation, and longer-term continuation.

The analysis emphasized two forms of comparison. First, temporal comparison examined differences between pilot-period implementation and reflections 6 years post-pilot, including the period of pandemic disruption. Second, cross-role comparison examined how participants in distinct institutional positions interpreted sustainability, change, and loss. The analytic focus was interpretive and not evaluative, privileging participant meaning-making and retrospective sense-making over measurement of impact.

3.6. Chapter Organization and Analytic Roadmap

To orient the reader, the results are organized into seven analytic domains that structure the presentation of participant accounts and cross-role contrasts. Each domain is developed through participant quotations, role-specific perspectives, and local syntheses:

- Practices described as ***sustained***. How participants narrated routines that continued beyond the pilot and how these were situated within everyday work.
- Practices and structures described as ***discontinued***. Which elements participants said did not persist after formal supports ended and the reasons they offered.
- Practices described as ***having evolved.*** Ways participants reported changes in format, delivery, and leadership across time and context.
- Pandemic as a ***naturalistic stress test***. How participants interpreted the adaptability of practices under remote and hybrid conditions.
- ***Sustainability conditions*** that enabled continuation. Organizational, relational, and structural conditions participants identified as supporting the continuation of trauma-informed practices beyond the pilot period.
- ***Implementation versus sustainability***. Contrasts between the factors participants associated with initial implementation and those linked to longer-term continuation.
- ***Divergent perspectives across roles***. Areas where participants differed in how they interpreted what endured, what diminished, and what "counted" as trauma-informed practice across institutional roles.

Across roles, participants offered perspectives shaped by professional responsibilities, institutional locations, and proximity to the pilot during different phases of the 6-year period. These role-based differences inform how participants recounted implementation, organizational

change, and post-pilot developments. The analysis attends to multiple situated perspectives to understand how trauma-informed work was interpreted and enacted across levels of the system.

3.7. Data Analysis

Data analysis was iterative and interpretive, beginning during data collection and continuing through systematic coding, cross-role comparison, and theme refinement. The analytic purpose was not to assess implementation fidelity, estimate prevalence, or make causal claims, but to examine how trauma-informed practices associated with the TIP Pilot Study persisted, transformed, or disappeared over time, and under what conditions these shifts occurred. Analytic attention focused on patterns of durability, adaptation, and erosion on the contextual and organizational conditions shaping continuation and on the tensions between initial implementation supports and long-term sustainability, as reflected in participant accounts 6 years after the pilot concluded and following pandemic disruption.

Given the study's dual aims to examine whether sustainability conditions identified in the literature were present in post-pilot contexts and to surface meanings and mechanisms not previously theorized to emerge, a hybrid deductive-inductive qualitative analytic approach was used. This approach allowed the analysis to be both explanatory (confirmatory) and exploratory, aligning the analytic strategy with the study's implementation science framing while remaining open to emergent, context specific dynamics.

Initial coding and analytic organization were conducted using Dedoose qualitative analysis software. Transcripts, analytic memos, codes, and analytic matrices were stored and organized within the Dedoose environment. All interview transcripts were fully de-identified prior to being entered into any analytic software, including Microsoft Copilot, to protect participant confidentiality and reduce deductive disclosure risk. All quotations used in the

findings were verified against the original audio recordings to ensure transcription accuracy. All interview transcripts were stored verbatim with continuous page and line numbering to support analytic audits. Quoted excerpts are cited parenthetically using a transcript locator that include participant role abbreviation followed by transcript page number and line range. Participant role categories are used in place of individual identifiers to preserve confidentiality.

3.7.1. Phases of Analysis

Data analysis occurred in five phases.

3.7.1.1. Phase 1: Immediate Post-Interview Analysis

After each interview, I re-listened to the recording and wrote analytic memos documenting initial impressions, emerging concepts, and potential relationships between participant experiences and the broader implementation context. This early-stage memo writing helped preserve nuance while preventing premature interpretive closure (Charmaz, 2014).

3.7.1.2. Phase 2: Hybrid Coding in Dedoose

In this study, a hybrid coding approach was used, meaning that analysis combined both deductive and inductive qualitative strategies. A deductive approach involves applying codes derived from existing theory, empirical literature, and the study's research questions. In this analysis, deductive codes reflected constructs from implementation science and trauma-informed frameworks such as leadership stability, implementation supports, policy alignment, workforce turnover and contextual disruption that have all been identified in prior research as relevant to sustainability. Using deductive coding allowed the analysis to examine whether these theoretically important conditions were present, absent, or transformed within the TIP Pilot Study contexts during and after the pilot period, thereby supporting confirmatory or explanatory analytic aims.

An inductive approach involves generating codes directly from the data, allowing participants' meaning, emphases and interpretations to shape analytic categories. Inductive coding enabled the identification of patterns and mechanism that fell outside the pre-existing deductive framework, including participant-generated distinctions and unexpected forms of continuity.

A hybrid deductive-inductive approach was therefore necessary to address the study's research questions. Deductive coding alone would have constrained analysis to previously theorized sustainability factors, potentially obscuring novel mechanisms of persistence. Inductive coding alone would have limited the study's ability to situate findings within the broader implementation science literature. By integrating both, the analysis was able to examine sustainability as simultaneously theory-linked and contextually emergent.

Inductive codes captured patterns emphasized by participants themselves. Initial open coding was conducted in Dedoose on three transcripts to generate emergent codes grounded in participants' language and sensemaking. Examples included brain science as a foundation for sensemaking, practice kernels that traveled across contexts, cultural messaging that substituted for formal coordinator roles, universal framing that reduced staff resistance, and distinctions participants drew between pilot-era implementation supports and long-term sustainability conditions. These inductively generated codes informed the development of an initial coding framework.

Initial descriptive coding produced approximately 20–30 distinct codes across approximately 60–90 coded excerpts in the first full coding pass, based on counts observed in the three fully coded transcripts and extrapolated across the dataset once the codebook was stabilized. Subsequent passes refined code boundaries, merged overlapping codes, and

differentiated mechanism from contextual conditions (see Appendix D for the final codebook and version history).

3.7.1.3. Phase 3: Extending Coding and Thematic Development Using AI-Assisted Pattern Detection

After the initial human coding structure was established in Dedoose, an AI-assisted analytic tool (Microsoft Copilot) was used to support pattern detection across the full transcript set. All interview transcripts were de-identified prior to being entered into Microsoft Copilot and were processed one transcript at a time to minimize deductive disclosure risk (see Appendix E for the anonymized role crosswalk and de-identification scheme; see Appendix F for the Copilot prompt and AI-analytic boundaries) The earlier human-coded transcripts served as a calibration reference for identifying recurring language, thematic clustering, and concordance across interviews.

The generative AI tool was used to highlight potential thematic patterns, while all coding decisions and code counts remained anchored in the Dedoose analytic environment and were retained by the researcher. AI-generated suggestions were reviewed manually against transcripts and analytic memos, and only themes supported by direct transcript evidence were retained. This approach allowed the study to leverage computational pattern detection while maintaining interpretive accountability and alignment with qualitative analytic standards. All analytic judgments including code assignment, theme construction, and interpretation were conducted exclusively by the researcher; AI tools were used only to surface candidate patterns for human review and did not generate or validate analysis.

3.7.1.4. Phase 4: Cross-Role and Cross-Phase Comparison

Matrices and time-ordered displays were constructed to compare patterns across participant roles and across phases including the pilot period, post-pilot years, pandemic disruption, and the present (see Appendix G for per-transcript coding tables and Appendix H for cross-role matrices/time-ordered displays.) Through constant comparative analysis, minority cases and disconfirming were deliberately retained alongside more prevalent patterns.

3.7.1.5. Phase 5: Theme Refinement and Participant Feedback

Themes were refined through repeated comparison with original transcripts and analytic memos. When participants provided feedback during member checking, that input informed refinement of conceptual boundaries and language used to describe themes.

3.7.2. Alignment With Research Questions

The analytic structure addressed what persisted the conditions that related to this persistence, how understandings of "trauma-informed" evolved, how sustainability conditions differed from implementation factors, and how the pandemic functioned as a durability test. Codes and analytic displays were aligned to these areas of inquiry to maintain analytic focus and transparency.

3.7.3. Trustworthiness and Rigor

Credibility was supported by role-heterogeneous sampling; iterative verification during interviews; triangulation across practitioner, leadership, coordination, systems, research, and community perspectives; and analytic memoing to surface alternative explanations. Dependability was established through a documented audit trail, including recruitment decisions, four codebook iterations, and analytic procedures. Confirmability was supported by explicit linkages between data excerpts, analytic memos, and interpretive claims. Transferability was

enabled through detailed description of the pilot context, post-pilot resource conditions, and pandemic disruption to allow readers to assess relevance to other settings. Reflexive notes documented assumptions, positionality, and interpretive shifts.

I also maintained a methods log noting timestamps of recruitment waves, rationale for sampling pivots, codebook revisions, and analytic decisions made during interpretation, this record forms part of the study's audit trail. The analytic codebook underwent four iterations before stabilization for cross-case comparison, and these revisions are documented in the methods log and codebook version history (see Appendix D; see Appendix I for a methods-log excerpt).

3.8. Ethical Considerations

The University of Oregon Institutional Review Board approved all study documents and procedures before recruitment and interviewing. All participants provided informed consent, including consent for audio recording and the use of de-identified quotations. Given the visibility of some roles, confidentiality procedures included pseudonymous initials, generalized role labels, and removal of potentially identifying site details. Audio files, transcripts, and memos were stored on encrypted, access-restricted drives. Participants received a 20-dollar Amazon virtual gift card for their participation.

Because certain formal positions associated with the pilot were held by a very small number of individuals, detailed employment timelines, institutional affiliations, and specific job titles are not reported. Participants are described through generalized functional role descriptors that reflect their system-level relationship to the initiative and their temporal proximity to its implementation. This approach balances analytic transparency with ethical responsibility in a

context where the population of eligible participants was limited. A detailed anonymized role crosswalk and de-identification scheme is provided in Appendix E.

CHAPTER IV

4. RESULTS

This chapter presents findings from qualitative interviews with eight participants representing diverse roles connected to Oregon's 2016–2019 Trauma-Informed Practices (TIP) Pilot Study and its 6-year aftermath. Using cross-case, longitudinal thematic analysis, I designed the interviews to examine:

1. "What conditions allowed trauma-informed practices to persist once formal structures disappeared?"
2. "What proved durable under crisis?"
3. "What gets lost when initiatives end?"

Instead of quantifying implementation outcomes, my goal was to examine patterns, mechanisms, enabling conditions, and tensions shaping how trauma-informed practices were interpreted, enacted, adapted, sustained, or discontinued across institutional roles and across three temporal phases: the pilot implementation period, post-pilot continuation, and the disruption associated with the COVID-19 pandemic. Examining these phases together allows the analysis to trace how ideas introduced through a time-limited initiative evolved as they moved through changing organizational conditions and broader social disruption.

This pattern of post-pilot continuation aligns with the sustainment phase of the *Exploration, Preparation, Implementation, Sustainment (EPIS) Framework*, which emphasizes that long-term endurance depends not only on initial implementation supports but on the extent to which practices become integrated into everyday organizational routines and professional culture once formal structures are removed (Aarons et al., 2011).

4.1. Overview of Participants and Timeframes

4.1.1. Description of Participant Roles, Domains, and Implications for Findings

Participants are described using generalized role descriptors instead of individual identifiers to reduce deductive disclosure risk within the small population of individuals directly connected to the pilot. These descriptors reflect participants' system-level relationship to the study and their temporal proximity to its implementation. Direct quotations are used throughout the chapter to illustrate areas of convergence and divergence across roles, professional responsibilities, and institutional perspectives. Quoted excerpts are cited using a transcript locator consisting of the participant's generalized role label followed by transcript page number and line range. This citation method allows readers to trace excerpts within the de-identified transcript set while preserving confidentiality (see Appendix J).

4.1.1.1. School-Based Perspectives (SB-P, IC, SB-L-1 and SB-L-2, n = 4)

Four participants represented school-based perspectives: a school-based instructional practitioner, a school-based implementation participant, and two school-based leadership participants. Collectively, these participants provided insight into how trauma-informed concepts were translated into day-to-day school practice, including classroom experimentation, professional learning processes, school culture shifts, and leadership decision-making related to integrating trauma-informed approaches into routine school operations.

Participants' involvement spanned multiple phases of the pilot trajectory. One instructional practitioner entered the pilot during the later implementation period and remained at the same school through the post-pilot years and the COVID-19 pandemic, allowing for comparison between practices visible during active implementation and those that remained embedded several years after formal pilot support ended. Another participant entered the school

environment near the conclusion of the pilot period and provided insight into the immediate post-pilot environment, including which practices remained visible and how trauma-informed work was communicated to staff entering the school after formal implementation had ended.

The other two participants contributed perspectives from the implementation period itself, offering insight into how trauma-informed principles were interpreted by school leadership, translated into school-wide structures, and embedded within daily routines.

Together, these school-based perspectives provide a layered view of how trauma-informed ideas moved from training environments into classroom practice, organizational culture, and leadership decision making.

4.1.1.2. State Policy Design Advisory Perspective (SPD, n = 1)

One participant contributed a pilot design and advisory perspective, informed by involvement in the early foundational principles and development of the pilot initiative. This vantage point provides insights into the core substance and collaborative processes that shaped the creation of the pilot, including early discussions about trauma-informed frameworks, advisory engagement across organizations, and the selection of models used to guide implementation.

This perspective provides important context for understanding the intentions that guided the original design of the initiative. It also highlights the structural realities that accompany large-scale reform initiatives. They described how early underlying content and framing, advisory collaboration, and funding structures can generate momentum for new initiatives while also creating challenges for sustainability once formal pilot structures and designated resources conclude.

4.1.1.2. External Research and Evaluation Perspective (ER, n = 1)

One participant contributed an external research perspective connected to the analytic interpretation and evaluation of the pilot initiative during its implementation period. This participant provided insight into the methodological design of the original evaluation, including the data collection approaches used to document pilot implementation and the analytic frameworks guiding the interpretation of pilot outcomes.

Their reflections also illuminate methodological constraints that shaped the conclusions presented in the original evaluation report. This perspective allows for comparison between findings documented during the formal pilot period and the retrospective interpretations offered by practitioners and leadership participants several years later. This comparison provides an additional analytic layer that supports examination of how early implementation findings align with or diverge from the sustainability patterns described in the present study.

4.1.1.3. Community Organization Perspectives (CO-A and CO-P, n = 2)

Two participants contributed perspectives from organizations operating outside the formal school system. One served as a community organization advisory participant involved in the pilot advisory committee. The other represented a community organization partner engaged in trauma-responsive youth development and collaboration with youth-serving systems.

These perspectives provide insight into trauma-responsive practices developed outside institutional school systems. The community organization partner described approaches grounded in relational and culturally informed frameworks that predated the pilot initiative, illustrating how trauma-responsive practices can be sustained through organizational mission, cultural practice, and long-standing community relationships beyond time-limited initiatives.

The community organization advisory perspective complements this view by highlighting how community-based actors contributed to shaping conversations about trauma-informed approaches during the pilot's development, illustrating how trauma-informed work often exists within broader community ecosystems beyond school-based reform efforts.

The sections that follow develop each of five domains identified through qualitative analysis, integrating participant quotations and cross-role contrasts, followed by syntheses that examine how these perspectives illuminate the dynamics surrounding implementation, adaptation, and longer-term continuation.

4.1.2. Longitudinal Coverage and Analytic Rationale

Participants' experiences collectively spanned four distinct phases: pilot design, active implementation (2016–2019), post-funding transition, and the multi-year period that included pandemic disruption. This temporal distribution enables examination of sustainability beyond the implementation window and allows comparison between structured pilot conditions and post-scaffolding continuation.

Although individual tenures varied, the analysis does not treat participants as representing uniform exposure across all phases. Temporal insight is constructed through cross-role aggregation, with attention to how participants situated their reflections relative to pilot-era and post-pilot conditions. This framing shifts the focus from whether the pilot "worked" during implementation to how trauma-informed reform was experienced once formal supports were removed and contextual stressors intensified.

4.2. Domain 1: Practices Sustained Beyond Pilot Implementation

Practices described as persisting included student check-in systems grounded in the Zones of Regulation framework, scheduled instructional student breaks, relationship-centered

classroom routines, direct teaching of regulation strategies, and ongoing administrative cultural reinforcement of trauma-informed principles. Across these examples, sustained school practices shared several defining characteristics. They required minimal financial resources, could be embedded within existing instructional workflows, aligned with educator identity and beliefs about effective teaching, and allowed flexibility of format over time.

4.2.1. Brain Science as Foundation for Sustainability

Across all participant roles, brain-based explanations of stress, regulation, and learning were consistently described as foundational to the endurance of trauma-informed practices. Participants did not describe brain science as a standalone intervention. Rather, they characterized it as an explanatory framework that made multiple strategies coherent and credible over time. This framing appeared across school-based, research, advisory, and community roles, indicating a shared understanding of brain science as the guiding instructional lens and anchor that sustained trauma-informed practices after formal structures faded.

Several participants reflected on the strategic value of anchoring the work in a neurodevelopmental model, explaining that the intent was to help educators understand student behavior through a developmental lens rather than simply responding to surface-level behaviors. A school-based instructional practitioner described how neurological understanding shaped educators' thinking about learning and regulation and acted as a bridge between relational practice and scientific legitimacy:

> There is the science element about how the brain reacts to certain situations. And the more regulated you are, the more open your brain can be for learning. paired with these are the components on a human level that kids need to have taken care of in order to free up that brain space. It all works together. (SB-P, p. 11, lines 297–300)

Community-connected participants emphasized the accessibility of brain science language when communicating with adults about trauma-informed practice, as told by a community organization advisory participant: “If we’re intentionally designing our learning communities in ways that are attentive to the best practices in brain science, then we can create really good and healthy learning environments for students” (CO-A, pp. 11–12, lines 347–349).

An external researcher highlighted the growing knowledge base surrounding brain development and stress regulation: “We’ve looked at brain science a lot more now. We have better understandings of the way that brains develop, they hear things and they understand things” (ER, p. 15, lines 404–405).

A school-based leadership participant emphasized how this scientific framing reshaped educator perspectives on relationships and learning:

> You really have to change the paradigm for how staff think about relationships with students and what it means to support students and understand brain science. They really need to have a deep understanding of brain science, and that students cannot learn and engage and come to school and be. (SB-L-1, p. 11, lines 293–295)

Participants also referenced how understanding physiological regulation became central to classroom readiness for learning. As one community organization advisory participant explained:

> When I think about trauma-informed, I know automatically some people get shutdown. So, I do not actually talk about it in those terms. I like to talk about how we know a lot more about brain science now than we ever did before. And we know about what happens when someone is dysregulated. (CO-A, p. 12, lines 342–345)

Participants further described how neurological frameworks informed specific instructional strategies. An implementation participant explained how the Neurosequential Model provided a foundational explanatory framework for staff:

> Collaborative learning, collaborative problem solving makes sense if you know how the brain works. Trauma stewardship makes sense if you know how the brain works. The Sanctuary Model makes sense if you know how the brain works. Fostering resilient learners makes sense if you know how the brain works. But because all of them use different language to talk about the brain and the impact of trauma, it was confusing for staff. (IC, p. 4, lines 110–115)

Similarly, this same participant referenced the hierarchical organization of the brain when explaining regulation strategies:

> I could evaluate how people were integrating this knowledge or not integrating it into their work. And then I could see the problem. And the problem was very clearly that people were dosing. People didn't see how it fit into the work, and there were so many different varieties of it. So that kind of helped me with getting at least the foundation with the Neurosequential Model. (IC, p. 5, lines 115–119)

Across roles, participants suggested that grounding trauma-informed approaches in neurological explanation reduced skepticism and positioned the work as instructional rather than therapeutic. The emphasis on cognitive access, stress response, and regulation connected trauma-informed practices to educators' core instructional responsibilities, helping situate the work within everyday pedagogical reasoning rather than as an external initiative.

This dynamic helps explain through interviews that brain science functioned as an interpretive anchor supporting long-term enactment. Rather than requiring continued structural

reinforcement, the explanatory coherence of neurological models appeared to enable educators to internalize these principles and apply them autonomously across changing contexts. In this sense, brain science functioned less as a standalone intervention and more as a scaffolding framework that sustained relational, regulatory, and instructional practices once formal pilot structures were removed.

4.2.2. Relationship Building as Foundational Practice

Across all role categories, participants consistently identified relationship building as the most enduring and foundational element of trauma-informed practice. The sections that follow describe both this relational orientation and the specific strategies through which it was enacted. Unlike specific tools or protocols, relationship-centered practice was described less as a discrete intervention and more as an organizational lens shaping everyday interactions. Participants repeatedly emphasized that relational attunement functioned as the central mechanism through which trauma-informed practices were understood, adapted, and sustained.

The school-based instructional practitioner emphasized that relational connection was viewed as the gateway to other trauma-informed strategies, “any way that you can build relationships with your kids opens the door to the rest of it” (SB-P, p. 14, lines 398–399). Participants who arrived post-pilot described observing relational practices already embedded in school culture, including door greetings, individualized check-ins, and attention to students lived experiences. These practices were described as visible norms, not formal requirements. The school-based instructional practitioner emphasized that knowing students beyond academic performance was essential to effective teaching:

> If you are sitting here in February, March, April, and you still haven’t been able to really have a conversation with a kid, and you don’t know anything about their family, and

> what their circumstances are, and what they're bringing to school, you just know that they're failing. That's not good enough, in my opinion. Do the easy things. Do the simple things but do them. (SB-P, p. 14, lines 400–404)

Participants also described relational support as a key resilience factor for students who had experienced adversity. The school-based implementation participant explained: "One is relationships with adults, caring relationships with adults. I think by far that's the biggest thing. If you had one person that paid attention to you despite all your traumas, that is such a huge resiliency factor" (IC, p. 21, lines 572–574).

School-based leadership participants similarly framed trauma-informed practice as requiring educators to attend to the experiences students bring into the classroom. One leader explained:

> Being very student-centered, the experiences that students are bringing with them into the building and making sure that our systems and structures consider the adverse experiences that some of our kids are experiencing on a daily basis. And so, instead of being very binary in our practices in education, and this is what you need to do, it's so much more complex. I think that it was just bringing in the students' experience into our decision making. (SB-L-2, p. 2, lines 30–35)

Another school-based leadership participant described relational support as part of educators' core responsibilities: "Our job is to approach every student with care, and every student with opportunities to learn, and give them strategies for managing stress and managing their own brain science" (SB-L-1, p. 6, lines 139–140).

Participants across roles framed relationship-centered practice as directly tied to students' sense of safety and belonging within the learning environment. A pilot design and advisory participant described trauma-informed practice as:

> There are efforts, activities that recognize the presence of trauma in our population, actively seek not to retraumatize students, and then highlight practices that develop belonging, safety, within our classrooms and schools. And that there has to be a number of components on it because to be a professional educator, you have to understand some of the science and some of the research. So being able to recognize its importance. (SPD, p. 11, lines 301–305)

The same participant emphasized the foundational role of these relational conditions in supporting learning:

> I think it's so fundamental. It's getting at the lowest level of Maslow's hierarchy of needs, that feeling of belonging and safety. And without that, I'd argue that none of the other higher cognitive things that we aspire to can take place. So, it's trying to get at a very fundamental core issue, core strength. Because when you do feel belonging and you do feel safety, that pyramid is really powerful. (SPD, p. 12, lines 314–318)

At the same time, community-based perspectives suggested that the relational emphasis highlighted by the pilot was not entirely new. One community organization partner participant reflected:

> I was surprised that people didn't understand that building relationships with people is important when you work with people. You know while still having boundaries, things like that, but being able to be authentic with each other and helping people identify what their needs are instead of people telling them what they need. (CO-P, p. 7, lines 176–179)

This divergence highlights the interpretive variability across roles. For many school-based practitioners, the pilot offered language, legitimacy, and meaning-based framing that made relational work feel professionally sanctioned. For community-based actors, relational engagement was already deeply embedded in practice and understood as a longstanding cultural expectation, not a reform outcome.

Across perspectives, sustainability appeared linked to the alignment between relational practice and educator identity. When participants described relational work as intuitive, ethically resonant, or consistent with their existing professional values, it required little external reinforcement to continue. Relationship-centered practice did not persist as a labeled initiative; it became normalized as part of routine teaching. Participants emphasized that relational practices endured not because of structural maintenance, but because they were absorbed into professional norms and daily interaction patterns. This pattern reflects a broader cross-role conclusion that practices grounded in human connection were more likely to persist once formal pilot structures ended.

4.2.3. From Administrative Support to Cultural Reinforcement and Teacher Ownership

Multiple school-based participants described continued administrative support for trauma-informed principles 6 years post-pilot. However, this support differed from the coordinator-led professional development structures that characterized the pilot period. Participants described ongoing reinforcement through embedded cultural messaging, not formal programing. Across participants, administrative support did not disappear over time, but shifted in form, from structured, administrator-led implementation to culturally embedded reinforcement that increasingly enabled teacher ownership and leadership of trauma-informed practices.

Participants indicated that trauma-informed principles continued to be referenced in professional learning environments and school messaging, though typically in less formalized ways than during the pilot years. A school-based leadership participant described the original administrative intent during implementation as focusing on broad staff learning: “The intention was to look at how we could move trauma informed practices forward through comprehensive training of staff” (SB-L-1, p. 1, lines 8–9).

Over time, however, reinforcement shifted from formal training structures toward cultural signaling. The school-based instructional practitioner explained that trauma-informed practices were often modeled implicitly through professional learning experiences themselves:

> It’s not a directive. You know. It’s not saying you must give your kids breaks. But, I mean, in, you know, our training and stuff, they make it clear, like, you guys are adults and can’t sit here for 90 minutes and listen to administrators talk in the training, you know, without feeling antsy and distracted. (SB-P, p. 4, lines 95–98)

Participants described trauma-informed language and expectations being referenced in staff meetings, incorporated into discussions about student support, and reinforced through broader school messaging about mental health and well-being. Participants described these references as part of a shared communicative environment rather than as components of a structured program.

School-based leadership participants also described how administrators highlighted examples of classroom practices aligned with trauma-informed principles, reinforcing these approaches through recognition and discussion among staff. Leadership participants described a general sense of staff readiness to engage with this work during the pilot period, which appeared to contribute to the persistence of these cultural messages after formal coordination structures

ended: “I would say the majority of the staff at (the high school) felt like they were in this place ready to move on and learn and grow for the sake of the students” (SB-L-2, p. 3, lines 87–89).

An external research participant also emphasized that embedding trauma-informed practices into routine professional behavior required sustained learning and adaptation over time. The researcher explained: “It feels like something that needs quite a bit of training to really become embedded in the way that you do things normally” (ER, p. 8, lines 215–216). The same participant reflected on the evolving nature of the pilot during implementation: “It was a pilot and it was moving over time, and everybody was learning” (ER, p. 4, lines 106–107).

From this perspective, sustainability depended not only on initial training but on continued reflection about staff capacity and readiness. This aligns with descriptions from school-based participants who noted that teacher-led approaches gradually replaced administrator-directed efforts as staff developed confidence and ownership of the work. A community organization advisory participant highlighted the relational coaching dimension of leadership:

> I think that in many ways, the role of the principal is on coaching individual teachers. What are you learning? What are you trying? And spreading that influence, you know, creating communities that are useful to teachers as they’re thinking about how I mean, teaching is so hard to do, and so understanding and having vulnerability and support for teachers, you know, I think is a really important and tough job. (CO-A, p. 11, lines 300–305)

School-based leadership participants echoed this shift from directive leadership to teacher-driven practice:

> We started off with leadership pushing out a lot of the training. And then as we moved forward, we had more capacity for teachers to be able to lead that work, especially as we shifted into restorative practice. We ended up with a really strong teacher-driven leadership team, and they were taking ownership of that work. So, it was much less admin push, admin driven. (SB-L-1, p. 4, lines 88–91)

This reinforces the broader finding suggesting that trauma-informed practices continued to be reinforced through cultural messaging rather than through formal structural supports. Interviews indicated that administrative signaling functioned as a substitute for formal coordination, though without the stability of a funded coordinator role. Under these conditions, sustainability depended on leadership commitment and institutional memory rather than dedicated personnel. Across roles, participants portrayed administrative support as a diffuse but persistent presence that shaped expectations, highlighted effective practice, and maintained trauma-informed principles as part of the cultural vocabulary of the school.

4.2.4. Integration of Equity and Trauma-Informed Practices

Several participants described intersections between trauma-informed practices and equity-focused initiatives within their schools. Rather than operating as separate reform efforts, these domains were often discussed as mutually reinforcing. To reflect the multilevel nature of these intersections, this section begins with school-based descriptions of integrated practice, moves to cross-role illustrations of equity considerations, and concludes with system-level and community reflections on how equity framing strengthened sustainability.

School-based leadership participants described trauma-informed approaches as frequently embedded alongside equity work within district practice. One leadership participant explained:

> I would say that it was part of what we did in the district. So, it was very common language and something that we centered around. When we talked about professional development and instructional practices and even discipline practices, it was always through the lens of being trauma-informed. And we were doing more around equitable practices and then tying trauma-informed practices into that. It felt very, very clear what they were doing around trauma-informed practices and what practices they were actually using. So rather than just language that they were using, I felt like (the school) actually was applying what they were doing. (SB-L-2, p. 1, lines 20–26)

Participants also described how staff roles and committees often intersected across trauma-informed and equity initiatives. One school-based instructional practitioner explained how personnel connected these efforts across multiple areas of school programming: "(Our TIP Coordinator) was on the equity team. (They) supported administrators with their goals and what they were working on and worked with our multicultural coordinator and our affinity groups and things like that" (SB-P, p. 4, lines 116–119). School-based leadership participants highlighted the diversity of student experiences that educators must account for when addressing stress and learning:

> For me, trauma-informed practice is understanding that students come to us with a wide variety of backgrounds and life experiences that shape how they manage stress in any given situation, and how they react to stressful situations. And so, our work is to understand that we don't necessarily have to know all of that background. (SB-L-1, p. 5, lines 131–134)

Across accounts, trauma-informed approaches were described as encouraging educators to consider systemic context alongside individual behavior. Participants noted that examining

student stress responses, sense of safety, and relational connection often surfaced inequities that might otherwise remain unexamined. One school-based leadership participant explained how equity and TIP aren't necessarily in the same vein, but must be understood separately to be understood together:

> I think that what it did is that it made us realize the impact a little bit more. So, you know the impact of how students and families are impacted by inequitable systems that oppress. And so, it brought in a different perspective. So now we can talk about equity, but we can also talk about the impact. If we don't address inequitable systems that look to oppress people who have been marginalized, then we're not looking at the entire person. (SB-L-2, p. 5, lines 139–144)

Participants involved in pilot implementation described equity as shaping how trauma-informed practices were introduced to staff. One implementation participant noted that different educators required different forms of engagement and communication: "Some people need coffee chats, some people need weekly emails, some people need something different. We took an equity approach to it" (IC, p. 15, lines 403–404). This acknowledgement echoed broader patterns across interviews in which participants framed trauma-informed implementation as requiring responsiveness not only to student needs, but also to staff conditions, comfort levels, and access points.

Community-based participants similarly emphasized that trauma-informed work must address broader social and economic conditions affecting stability and well-being. One community organization partner participant explained: "We try to tie a lot of wraparound services to people in the community to try to help them get that stability in their life, and it's not just in crisis" (CO-P, p. 5, lines 119–120). The same participant emphasized that trauma-

responsive approaches extended beyond crisis response and included long-term life stability: “It is not just in crisis. It is also people going on to do other things like buying a house” (CO-P, p. 5, lines 120–121).

These descriptions illustrate how community organizations situate trauma within structural and historical contexts, emphasizing supports that extend beyond the academic environment. Advisory participants reflected on how the integration of trauma-informed practices with equity frameworks evolved over time. One community organization advisory participant expressed concern that trauma-informed training nationally sometimes lacked sufficient attention to equity:

> I saw we had some national trainers that were coming to train that continuum of care on trauma informed practice. And I was really horrified by some of the things that they said. I thought that it really lacked any sort of equity lens, and I was mortified that the system was implementing trauma informed practice in a way that was not at all a way that I would have seen done in Oregon. (CO-A, p. 8, lines 208–212)

At the same time, this participant noted strengthened alignment in Oregon over time:

> I think Oregon State’s understanding of having an equity lens has really grown over that time period, and so I would agree that it wasn’t the primary focus in the way that I think now it would’ve we would’ve had a lot more sophistication around what that looks like. (CO-A, p. 8, lines 204–206)

These reflections reinforced the view that trauma-informed practice cannot be disentangled from broader structural forces, including racism, economic marginalization, and differential access to services. A pilot design and advisory participant also described how the

original design logic explicitly linked trauma, inequitable access, and chronic absenteeism. This participant explained:

> We saw that there was a through line from trauma, lack of equitable services, and then the fact in Oregon that attendance, chronic absenteeism, differs depending on race and economic group and special education identification. So those things seemed to really be highly correlated. We were pretty certain that if we improved trauma related practices, we would see attendance go up. (SPD, p. 4, lines 108–112)

Participants noted that integration with equity work appeared to strengthen sustainability by expanding the relevance of trauma-informed practices beyond behavioral intervention and placing them within broader conversations about belonging, access, and opportunity. One school-based participant reflected:

> I think that the timing was really beneficial. If you take the silver lining of all of that time and all of the social injustices that were happening or not. I mean, they have always happened, but I think that we were facing it, right, and actually responding to it as much as we could within the school. I think all of the things that we learned about trauma had helped us in response to those things, even the political unrest and just everything going on during that time. (SB-L-2, p. 5, lines 121–126)

The consistency across roles strongly supports the indication that equity considerations enhanced the salience and durability of trauma-informed practices by situating them within concrete issues of access, identity, justice, and opportunity. Across roles, participants suggested that the fusion of equity and trauma-informed approaches created a more comprehensive framework for understanding student experience and responding in culturally attuned and

context-aware ways, and that this integrated framing persisted even once the TIP program formally ended.

4.2.5. Sustained Classroom-Level Practices

4.2.5.1. Zones of Regulation and Check-In Systems

Across school-based participants, Zones of Regulation and related emotional check-in routines were described as practices that helped students identify emotional states and allowed teachers to adjust classroom interactions accordingly. Participants described brief check-in processes embedded into daily classroom routines that allowed students to signal how they were feeling without publicly disclosing personal information. Because only one instructional practitioner participated in this study, quotes reflecting classroom-level implementation draw primarily from this individual's account; however, the underlying mechanisms of predictability, emotional attunement, low-cost routines and regulation-aligned check-ins were echoed across non-classroom participants even when not tied to a specific tool such as Zones of Regulation.

One school-based instructional practitioner described how visual regulation tools became widely used during the pilot period:

> At the time, we definitely pushed the Zones of Regulation charts. Almost every teacher had those. I actually adapted it and made it into a smaller version that we can all have on our teacher badge packets … a lot of teachers still have this or have had that in the past to use as a nonverbal check-in with students. (SB-P, p. 2, lines 51–54)

Other participants described similar practices in which teachers used quick emotional check-ins at the beginning of class. A school-based leadership participant described a process in which teachers used mood indicators to quietly assess student emotional states:

> Some teachers were doing warmups where they had the mood meter on their badge. As just a check-in, they would go around to every student and show them the mood meter, and the kid would just very privately point where they're at…That would tell the teacher, oh, you are in a state of high emotion right now, so I know that I need to approach you differently. (SB-L2, p. 3, lines 68–72)

These interactions were described as brief and integrated into existing classroom transitions, without adding additional instructional tasks. The same school-based leadership participant noted that the process often took only seconds per student, "it was during that transition period of students coming in and settling in… kids were working on the warmup activity, and then he would just go around… it was like less than five seconds" (SB-L2, p. 3, lines 77–80).

Several participants described variations of these check-in systems that allowed students to communicate their needs without verbal disclosure. A school-based implementation participant described the further adaptation of these check-in systems that expanded student agency by allowing students to indicate not only emotional state, but whether they wanted support immediately, later, or not at all:

> They started creating these little badges where they would check-in with a kid, and they would point to where they were on the scale of emotional dysregulation or regulation. And then they would also point to whether they want to talk now, talk later, or they don't need to talk. (IC, p. 21, lines 551–554)

Participants emphasized that when such check-ins became routine classroom practices, they could help prevent behavioral escalation as the school-based implementation participant described: "If you did that and that became sort of a ritual, rhythm, patterns, predictability… kids

would do this every day … kids could talk about what they needed to talk about before the blowout" (IC, p. 21, lines 555–557).

Teachers also adapted the format to fit their instructional environment. For example, the school-based instructional practitioner described digitizing the process through a daily student form: "The way that I've kind of digitized that is I have a Google form that students fill out every single day that asks them, where are you at, one to five? Do you want to check-in with me?" (SB-P, p. 7, lines 187–188).

Across interviews, several features appeared to support the sustainability of these practices. The routines required minimal financial investment, whether implemented through laminated charts, teacher badges, or digital forms. They demanded little instructional time, often occurring during classroom entry or warm-up activities. They also allowed nonverbal participation, reducing barriers for students who might be reluctant to discuss emotions publicly. These characteristics align with cross-role descriptions of low-cost, adaptable practices that fit within existing educator routines and reduce resistance.

Participants suggested that the flexibility of the practice also contributed to its persistence, as teachers were able to adapt the format to their own classrooms instead of implementing a rigid protocol. The school-based instructional practitioner noted that check-ins could also occur at the classroom door, allowing students to communicate their emotional state privately as they entered:

> Even if you're not comfortable coming up and talking to me or raising your hand…if we check-in with every kid as they come through the door… kids can kind of nonverbally communicate how they're feeling so that I have an idea of what they're bringing into the classroom. (SB-P, p. 2, lines 55–58)

These accounts converge on the conclusion suggested by the data that Zones-based and Zones-adjacent check-ins practices persisted not because of sustained structural oversight, but because their core function was simple, adaptable, and easily integrated into daily classroom workflow. While community-based and policy-level participants did not reference specific tools, they emphasized the same underlying features, including predictability, emotional attunement, and regulation support. These cross-role convergences indicate that the sustainability of check-in systems stemmed less from adherence to a formal curriculum and more from their explanatory coherence and alignment with trauma-informed principles that educators internalized and enacted through daily routines.

4.2.5.2. Scheduled Breaks and Regulation Time

Scheduled breaks within extended instructional periods were consistently described as a sustained practice 6 years post-pilot. Although not formally mandated, participants indicated that incorporating movement or cognitive breaks into longer class blocks had become routine in many classrooms. This pattern held across instructional, leadership, and implementation perspectives, with additional alignment from community partners who emphasized the need for predictable opportunities for regulation even when they did not reference specific school-based routines.

Because only one instructional practitioner provided direct classroom-level accounts, the following quotations reflect different aspects of how this individual observed break routines functioning across the building. The school-based instructional practitioner described how many teachers incorporated brief regulation periods into the beginning of class or during longer instructional blocks: “A lot of our teachers allow mindful minutes, you know, go for walks, have

breaks, you know, allow for students to come in and kind of have a warmup period with quiet coloring, drawing, reading, whatever" (SB-P, p. 3, lines 72–74).

Participants emphasized that these breaks were especially important in schools operating on extended block schedules. The instructional practitioner explained that breaks were widely embedded into classroom routines due to the length of class periods:

> I would say the majority of teachers do some kind of break throughout the day where they know we have long class periods here. We have 87-minute class periods. So, the vast majority of our teachers do know to build in a break to allow students to have a chance to regulate and do a preferred task to kind of calm down before getting back to work. (SB-P, p. 3, lines 79–82)

These breaks were not described as interruptions to instruction but as a strategy to maintain student engagement and readiness to learn. As the school-based instructional practitioner noted, students were given autonomy in how they used these short regulation periods:

> There aren't going to be any screens, but you have the freedom to do what you need to do in order to get calmed down and set for class. That doesn't take any prep. That doesn't take any time for you. That's just a part of your routine, and kids come to expect it, and that's very effective. (SB-P, p. 8, lines 223–225)

School-based leadership participants also described how some students learned to recognize when they needed regulation time during the school day: "Students would identify times in the school day when they knew their stress levels were getting to a space where they wouldn't be able to stay engaged in the classroom" (SB-L-1, p. 1, lines 24–26).

Participants linked the continued use of scheduled breaks to the brain-based learning concepts introduced during the pilot. The school-based implementation participant described the underlying rationale that had been emphasized during training:

> The big takeaway is that the more stressed you are, the more your brain is moving into survival mode, but it impacts your memory. It impacts your ability to process information...so to get to the cortex, you have to be regulated, including ourselves. (IC, p. 11, lines 293–298)

Although only school-based participants described specific break routines, community-based and research participants similarly emphasized the importance of recognizing when students or staff were dysregulated, responding with attuned adjustments, and providing opportunities to regulate before engaging in academic tasks. These cross-role reflections reinforce the mechanism behind scheduled breaks over the specific form the breaks took.

Several features appeared to support the continuation of scheduled breaks. The practice required no specialized materials or financial resources and could be implemented flexibly within existing instructional structures. Teachers retained discretion to determine the timing and format of breaks based on classroom conditions and student needs. This autonomy aligned with broader participant descriptions of sustainable trauma-informed practices as those that could be easily adapted without requiring formal oversight.

Scheduled breaks were described less as a discrete program and more as a normalized instructional adjustment grounded in shared understanding of stress, attention, and cognitive regulation. This normalization appeared to reduce dependence on formal reinforcement or external coordination. Across interviews, scheduled breaks persisted because they addressed a recognized instructional need while aligning with educators' growing understanding of brain-

based learning principles. The practice endured not through strict adherence to pilot structures but through its integration into the rhythm of extended class periods and its alignment with cross-role perspectives on regulation and readiness to learn.

4.2.5.3. Teaching Regulation Strategies

Participants consistently reported that direct instruction in regulation strategies remained part of classroom practice 6 years post-pilot, although specific tools and formats evolved. The core emphasis on helping students recognize and manage stress responses persisted. Across roles, participants emphasized that the instructional focus on regulation endured because it aligned with brain-based explanations introduced during the pilot and because teachers internalized these approaches as part of everyday practice.

Participants described learning and teaching a range of regulation techniques during the pilot. A school-based instructional practitioner explained, "we learned about a variety of different emotional regulation strategies, you know, deep breathing, square breathing, movements, music, stretching, things like that" (SB-P, p. 3, lines 61–63). School-based leadership participants similarly described teaching students' strategies designed to help them regain cognitive focus and remain engaged in classroom learning.

Leadership participants also described the relational component of co-regulation between adults and students:

> When a student becomes dysregulated, then we even as adults can become dysregulated. And because they're children, it takes them a lot longer to regulate. Where we can regulate ourselves a lot quicker and easier. So just being mindful of that. Are you getting into a situation where you are now dysregulated, and how does that benefit the student? Because if you can regulate yourself, the relationship between adults and students. If

you're regulated, then they can come down a lot quicker than if you're dysregulated as well. (SB-L-2, p. 6, lines 175–181)

This emphasis on adult regulation echoed community-based perspectives that highlighted the importance of relational attunement and do no harm approaches in supporting student emotional states. Portability across settings also emerged. A school-based participant who later transitioned to a new school described carrying regulation instruction into a different context. One implementation participant described introducing breathing exercises directly with students: "The very first thing I did … was just square breathing. I had a Hoberman breathing ball and we did a couple repetitions of that, and I explained why it was useful and how it could help in the classroom" (IC, page 2, lines 48–56). The same participant recalled applying the strategy during a moment of acute student stress:

I said, "Hey son, let's do some square breathing." We sat there and did some square breathing for a little bit and the kid said, "I think I'm okay. I think I can go back in and take the test." (IC, p. 13, lines 349–352)

Participants attributed sustainability in part to the explanatory power of brain-based models introduced during the pilot. One school-based practitioner reflected on continuing to teach students specific strategies so they could apply them independently:

I do continue to be mindful about, like, teaching directly what different strategies are and try them out so that when, you know, for the rest of the year, kids' kind of have an idea of what works for them and what doesn't and how to apply it. (SB-P, p. 3, lines 75–76)

Participants across roles connected this persistence to the principle-based fidelity and clarity provided by pilot-era explanations about stress responses, survival brain activation, and the need to create conditions for cognitive access. Even community and research participants

who did not reference specific classroom tools emphasized the importance of predictability, co-regulation, and skill-building to help students manage stress and maintain learning readiness.

Across accounts, regulation strategy instruction appeared to shift from a structured pilot component to an internalized instructional competency. Although material tools were abandoned, the analytic rationale remained embedded in classroom practice. Participants suggested that once educators understood the neurological rationale for regulation strategies, these practices became part of their pedagogical repertoire rather than dependent on external reinforcement.

Participants' accounts also indicate that this internalization extended beyond individual classrooms and school sites. Educators described carrying trauma-informed principles and regulation strategies into new contexts, suggesting that sustainability was not solely dependent on institutional structures but also on the portability of practitioner knowledge. In this sense, trauma-informed practice functioned as both a set of instructional strategies and a new way of interpreting and responding to student behavior that educators enacted across settings.

Collectively, these reflections indicate that sustainability was tied less to maintenance of specific instruments and more to educators' internalization and portability of a coherent explanatory framework that supported routine application across contexts. This pattern reinforces a broader theme across interviews that trauma-informed practices endured when they aligned with educator identity, instructional judgment, and brain-based models of learning introduced during the pilot.

4.2.6. Summary: Characteristics of Sustained Practices

Across participant roles and institutional perspectives, sustained trauma-informed practices shared several common characteristics. Practices that remained visible 6 years after the pilot's conclusion were generally simple to implement, required minimal financial resources, and

aligned closely with educators' existing beliefs about effective teaching and student support. Rather than remaining dependent on formal pilot infrastructure, these practices became embedded within everyday classroom routines and professional norms.

Participants consistently described sustained practices as those that could be integrated into existing instructional workflows without requiring extensive training, additional staffing, or specialized materials. Strategies such as emotional check-ins, regulation routines, relationship-centered interactions, and explicit instruction in self-regulation were often incorporated into daily classroom practice in ways that felt consistent with educators' broader instructional responsibilities. Because these practices were flexible and adaptable, teachers were able to modify them to fit different classroom environments and changing circumstances over time.

Another feature of sustained practices was their grounding in a shared interpretive framework. Across roles, participants described brain-based explanations of stress, regulation, and learning as providing a coherent rationale that connected trauma-informed strategies to educators' core instructional goals. This explanatory framework helped position trauma-informed work as consistent with effective pedagogy rather than as an externally imposed initiative.

The alignment of findings suggest that sustainability was less dependent on continued program infrastructure and more closely tied to cultural integration within everyday educational practice. Practices persisted when educators internalized the underlying principles, incorporated them into routine pedagogical reasoning, and shared them through informal professional networks. By comparison, strategies that depended heavily on external funding, designated roles, or formal program structures were less likely to remain visible once the pilot concluded.

4.3. Domain 2: Practices That Disappeared

Participants also described elements of the pilot that did not persist following the conclusion of dedicated funding and coordinator roles. These discontinued components were generally characterized as resource-intensive, structurally dependent, or reliant on specialized personnel and equipment. Participants across roles emphasized that what disappeared tended to be material, staffing-heavy, or coordination-driven rather than theory-driven in nature.

Importantly, participants did not equate discontinuation with failure. In many cases, specific tools or structures were abandoned while underlying concepts remained in modified form. This distinction between structural maintenance and practice-logic continuation emerged repeatedly throughout interviews. Participants described these shifts as evidence that the principles, rather than the formal structures, endured.

Practices described as no longer in use included biometric tools introduced during the pilot, dedicated school-based coordinator positions, formal cohort structures and Plan-Do-Study-Act (PDSA) cycles, systematic implementation data collection, and comprehensive all-staff training models. While these components were central during active implementation, participants consistently indicated that they were not sustained beyond the pilot period.

When viewed across institutional levels, discontinued practices were described as those requiring greater financial investment, ongoing coordination, time beyond routine instructional capacity, and external expertise. As funding and formal scaffolding ended, these components were not maintained within standard school operations. Participants repeatedly pointed to feasibility rather than philosophical disagreement as the driving force behind discontinuation.

The following subsections examine each discontinued practice and the mechanisms participants identified as contributing to its dissolution.

4.3.1. Biometric Tools and Equipment

Several participants described the use of biometric tools during the pilot period as a method for helping students visualize physiological stress responses and the impact of regulation strategies. One school-based instructional practitioner described how pulse oximeters were incorporated into classroom activities designed to demonstrate the relationship between regulation techniques and heart rate:

> We had a whole bunch of pulse oximeters, and we would take our pulse. We'd write it down. We would practice one of our strategies, and then we take our pulse again to see if it helped our pulse rate go down. (SB-P, p. 3, lines 65–68)

School-based leadership participants recalled similar practices designed to connect physiological responses with learning readiness: "They were using pulse oximeters to measure heart rate and breathing as students were entering into the classroom and then doing mindfulness activities as a way of trauma-informed practice to lower the heart rate and prepare students for learning" (SB-L-2, p. 1, lines 13–15).

In some cases, the biometric data were also used to better understand how school environments affected individual students. The same school leadership participant described attempts to examine the physiological impact of school-related stress:

> One of the ideas was, well, let's put the pulse oximeter on them and kind of replicate the study with this one student so that we can better understand the physiological impact that school is having so that maybe we can adjust some things that way. (SB-L-2, p. 8, lines 207–210)

Despite the instructional value participants associated with these demonstrations, the tools themselves were not maintained after the pilot period. A school-based instructional

practitioner explained that while the concept remained influential, the equipment was no longer in use: “The pulse taking isn’t necessarily a part of it anymore. I don’t continue to use the pulse oximeters, but I do continue to be mindful about teaching directly what different strategies are and try them out” (SB-P, p. 3, lines 74–76).

Participants suggested that discontinuation was primarily related to practicality rather than disagreement with the underlying concept. While biometric demonstrations helped illustrate brain-based regulation principles during the pilot, maintaining specialized equipment and structured measurement routines required time and resources that were difficult to sustain once dedicated pilot support concluded. Across roles, participants framed the discontinuation as a matter of feasibility rather than a rejection of the instructional purpose behind the tools. The neurological rationale endured even as the material devices were set aside.

4.3.2. Dedicated Coordinator Positions

Participants consistently identified the elimination of dedicated trauma-informed coordinator positions as one of the most significant structural changes following pilot conclusion. During the implementation period, both pilot schools employed individuals responsible for organizing professional development, supporting teacher practice, and maintaining program momentum. Across practitioner, leadership, and system perspectives, coordinators were viewed as early-stage catalysts whose contributions were difficult to replicate within standard staffing structures, serving as temporary scaffolds rather than enduring roles. Several participants described the central role coordinators played during implementation. A school-based implementation participant explained the scope of their role: “To manage implementation of the grant. Ensuring that the deliverables were met, and responsible for all

aspects of that grant from training to interventions, to cooperating with the research partners" (IC, p. 1, lines 23–25).

The coordinator role also allowed time and organizational capacity that typical school positions rarely provide. The same participant reflected:

> The best thing about this job is I had time to think and reflect. I wasn't teaching classes, I wasn't the dean, I wasn't isolated or insulated from the pressure cooker that a school is. I still helped out. I still walked the halls; I still greeted students. I am still wherever I could help out because that would give the information, I would need to apply this work or the lens that I would need to help make this work more palatable or more effective. (IC, pp. 15–16, lines 406–411)

School leadership participants also recalled the centrality of the coordinators in moving the work forward: "I met with (our TIP Coordinators) who were working really closely on implementation of the pilot strategies" (SB-L-1, p. 2, lines 51–53).

School-based participants emphasized that having a dedicated staff member responsible for guiding the work was particularly important during early implementation. The school-based instructional practitioner explained: "I think what's imperative is that there has to be somebody in the school that is seen as an expert or a specialist and has to be a part of the community" (SB-P, p. 18, lines 513–514).

Participants further described how coordinators helped educators navigate initial uncertainties and supported attempts to translate trauma-informed concepts into classroom routines. Participants consistently framed this phase of the work as one that required hands-on support from a person whose role was explicitly designed to "carry" the initiative until practices stabilized. An external research participant also described variation in implementation between

pilot sites as partly shaped by differences between the two coordinators: “A good example of that would be the fact that the two cohorts were really developed in two different ways. That it is led by two different coordinators opened up two different strategies” (ER, p. 3, lines 76–78).

This observation underscored the influence that coordinator interpretation and leadership had on the particular direction each school’s implementation took. These participant accounts converge on the conclusion that coordinator roles were catalytic during the pilot period, functioning as structural scaffolds that supported early adoption. However, once pilot funding ended, these positions were not maintained within normal staffing structures. Long-term continuation appeared contingent on whether practices had already been integrated into routine instruction and administrative culture prior to the removal of dedicated support. In this sense, the discontinuation of coordinator roles highlighted the distinction between structures necessary for initial uptake and the conditions that determine whether trauma-informed principles persist once those structures are removed.

4.3.3. Formal Cohort Structures and PDSA Cycles

During the pilot, both schools utilized cohort-based implementation structures. Selected teachers received intensive training and engaged in Plan-Do-Study-Act cycles to test trauma-informed strategies before sharing findings with colleagues. These formal structures were central to the implementation science design. Across the different roles represented, interpretations consistently described cohorts as the organized locus for early experimentation, professional learning and momentum-building during the funded period. Participants described the original cohort structure as an organized group of early adopters who met regularly to test and refine strategies. One instructional practitioner recalled: “I know that it was a definite team, and we met

as a team, on a fairly regular basis … I was a part of these regular meetings with these PDSA cycles that were going on" (SB-P, p. 1, lines 11–15).

This lens of adaptation within the cohort model was further exemplified by this same instructional practitioner as an iterative process that guided experimentation during implementation:

> When you're trying a new strategy, you plan what you would like it to do. You do it. You implement it in your classroom or in your school. You study the impacts of it over a period of time and then you decide, are you going to adapt it? Are you going to keep it? Are you going to get rid of it? (SB-P, p. 1, lines 20–23)

A school-based leadership participant similarly described the cohort as a group of early adopters that gradually expanded outward:

> There was a cohort of early adopters who were working, and then as we continued, we were able to broaden that out to more and more staff. But in the initial work, it was a small cohort of early adopters that then were able to grow over time. (SB-L-1, p. 5, lines 115–117)

An implementation participant referred to this group as the core implementation team responsible for early experimentation: "They were the original cohort. I think ODE saw value in that, and they said, you should have a cohort, and so that was one of the interventions, one of the things they wanted to do" (IC, pp. 10–11, lines 272–274).

An external research participant also confirmed that the cohort model was a deliberate design feature of the pilot:

> We were really interested in seeing if the approach to TIP worked. So really thinking about if using this cohort-based model, a really tight knit community, will be a good way

> to train educators and then that they essentially could be an informal "train the trainer" model. Information that those individuals received was going to spread throughout the school, if there was going to be scale, within that. Initially, if there would be uptake among teachers to begin with and then, if there was an uptake, to what extent would they facilitate the learning of other educators within their schools? (ER, p. 1, lines 11–18)

At the same time, external participants reflected that dissemination beyond the core team was limited. This same external researcher noted: "I do know that we saw a lot of inter-cohort connectivity, which is great, but it was hard to say that it had an impact on the broader school" (ER, p. 4, lines 110–111).

Participants attributed this in part to the resources and time required to maintain structured meetings and documentation once grant scaffolding ended, and in part to instrument and design constraints that made scale and spread difficult to both achieve and detect. After pilot funding concluded, PDSA cycles and formal cohort convenings did not continue; however, informal peer sharing and day-to-day collaboration persisted within existing professional routines.

Viewed collectively, these accounts indicate that the cohort model functioned well as an early-implementation apparatus but did not consistently catalyze schoolwide diffusion once dedicated structures and coordinator time were removed. What endured were the ideas and routines that educators had already embedded in everyday practice, not the formal cohort mechanisms themselves.

4.3.4. Data Collection and Formal Assessment

Systematic data collection specific to trauma-informed practice implementation did not continue beyond the pilot period. During active implementation, schools and research partners

employed structured assessment tools, including staff attitude surveys, social network analysis, and implementation tracking measures. These instruments were designed to evaluate adoption and diffusion during the funded period. Participants described this phase as highly organized and data-rich, reflecting the expectations of the pilot design rather than typical school routines.

School-based participants described multiple forms of structured data collection occurring during implementation. One school-based leadership participant explained: "The surveys that were developed through the study and the pilot were administered across all staff" (SB-L-1, p. 5, lines 111–112). An external research partner also described their analytic role in interpreting implementation data post-pilot, noting:

> The data was able to show that the cohort strengthened its ties to the project, or for the most part. Each of the cohort's kind of strengthened its ties to the project because of the way that the questions were asked. (ER, p. 3, lines 56–58)

School-based leadership participants also described how evaluation efforts examined staff understanding of trauma-informed practice and its classroom effects:

> The study was more around teacher training. So, the intention was to look at how we could move trauma-informed practices forward through comprehensive training of staff. And so, all of our study and testing was done around staff understanding of trauma informed practice and the impact it has in relationships in the classroom and student outcomes. (SB-L-1, p. 1, lines 8–11)

During the pilot period, participants also described reviewing outcome data associated with implementation. One school-based instructional practitioner recalled examining discipline trends over time: "When (our TIP Coordinator) was here, you could look at the bar graph. You

know? And over a couple of years, you know, referral the number of referrals written went down a lot" (SB-P, p. 5, lines 124–125).

School-based practitioners also described using shorter feedback cycles during implementation to evaluate classroom strategies. This same instructional practitioner explained:

> We would just regularly like, we do those strategies for a couple of months, and then we would look at the data, get feedback from students, and then we'd make adjustments to how we were implementing those strategies over time. (SB-P, pp. 2–3, lines 28–30)

Participants also described collecting student perception data during later phases of the work. The school-based implementation participant noted: "During the pandemic we did a survey to see how kids' sense of belonging. 90% of the kids felt that they belonged, and the national average is anywhere between 46–56%, at least at that time" (IC, p. 18, lines 477–479).

Despite the range of data collection methods used during implementation, participants indicated that systematic evaluation infrastructure was not sustained after pilot funding ended. School-based participants described post-pilot monitoring returning to standard school metrics such as attendance, behavior, and academic outcomes. Formal research instruments, cross-sectional surveys, and network analyses were no longer feasible without external support.

At the same time, participants described continued informal assessment within classrooms. School-based practitioners emphasized that everyday observation of student behavior and engagement became the primary mechanism for evaluating trauma-informed strategies once formal research instruments were no longer in use. Across interviews, participants emphasized that while structured data collection did not persist, the interpretive reasoning behind it endured. Practitioners continued to adjust based on real-time observation, student interactions, and routine accountability indicators already built into school systems. In

this sense, the discontinuation of formal implementation measurement did not signify abandonment of trauma-informed practice. Rather, evaluation shifted from structured research tools to practitioner judgment, existing school-wide data, and ongoing professional interpretation.

4.3.5. Comprehensive All-Staff Training

During the pilot period, both schools conducted extensive all-staff professional development focused on trauma exposure, ACEs data, brain science, and trauma-informed instructional strategies. These trainings were described as intensive and foundational, particularly during the early stages of implementation, but not all trainings elicited the results they were trying to employ.

School-based participants recalled that some educators involved in the pilot attended specialized training opportunities outside the school while others were part of more standardized, whole group intensives with the school-based implementation practitioner describing: “The 90-minute pieces were too theoretical, it wasn’t something that someone could take and then use right away” (IC, p. 3, lines 62–63).

An external research participant reflected more broadly on the structure of professional development models used in educational reform initiatives observing:

> I think a lot of the professional development that folks receive, especially in this area, is very sit and get, like, one time experience , and then it’s just, kind of go off and figure out how to implement it in your own classroom (ER, p. 1, lines 22–23).

The same participant contrasted this approach with the pilot’s design:

> This really used that cohort model to think about more of a longer-term use to think about a longer term strategy of learning together, and to see if that would help to deepen

> knowledge and practice use, deepen understanding, and kind of build those champions for it throughout the school (ER, p. 1, lines 25–28).

School-based leadership participants also described how trauma-informed concepts were integrated into broader district professional learning conversations during the pilot period:

> When it comes to discipline and consequences. Training staff to understand that students who are under a certain amount of stress aren't always in control of their formative thinking and aren't always making decision to the best of their ability. And so, our job is to support them in accessing their education and in helping them learn how to do that well (SB-L-1, p. 3, lines 79–83).

Participants consistently reported that the comprehensive all-staff training model used during the pilot did not continue after pilot funding ended and even adapted during the pilot years. Participants suggested that the reduction in formal training did not indicate diminished commitment. Rather, once baseline knowledge had been introduced, reinforcement occurred through ongoing professional dialogue and integration into everyday instructional decision making. Across descriptions of both micro- and macro-level work, participants described this evolution as a shift from structured, time-intensive training toward sustained cultural reinforcement that relied less on formal sessions and more on the internalization of trauma-informed principles.

Viewed collectively, these accounts suggest that while comprehensive professional development was critical during early implementation, its long-term sustainability depended on embedding trauma-informed principles into daily routines rather than maintaining intensive training structures once external funding ended.

4.3.6. Summary: Pattern of Disappeared Practices

Across discontinued components, a consistent pattern emerged. Practices that were not sustained beyond the pilot period tended to depend on dedicated funding, specialized personnel, structured coordination, or material resources that exceeded routine school capacity. When external scaffolding ended, these elements were not maintained in their original form.

However, discontinuation did not uniformly represent abandonment of underlying principles. In several cases, specific instruments, roles, or formal processes dissolved while core concepts persisted in modified and less resource-dependent formats. Biometric tools were discontinued, yet regulation instruction continued. Formal cohort cycles ended, yet peer exchange persisted informally. Intensive training structures ceased, yet foundational knowledge remained referenced in daily practice.

Accounts suggested a consistent pattern in which sustainability tracked resource independence and cultural integration rather than preservation of pilot-era infrastructure. Structural intensity characterized early implementation, while long-term endurance appeared contingent on whether practices could be internalized, simplified, and enacted without continued external support.

4.4. Domain 3: Practices That Evolved

Between practices that sustained in recognizable form and those that disappeared entirely, interviews indicated a third category: practices that evolved over time. Importantly, these patterns of evolution were already underway prior to the COVID-19 pandemic and reflected ongoing organizational adaptation rather than crisis-driven change. These adaptations occurred as schools navigated the conclusion of formal pilot supports and leadership transitions, as well as

broader shifts in organizational and social conditions. Participants emphasized that evolution was an expected and necessary response to changing contexts.

Unlike discontinued practices, evolving practices retained core functions while altering format, delivery mechanisms, or organizational structure. Participants emphasized that adaptation was not a deviation from the work but a necessary condition for its continuation. Evolution was described in several domains: professional development shifted from coordinator-led sessions to peer-supported exchange; trauma-informed language moved from explicit labeling to integration within "good teaching" discourse; tools were reformatted to align with technological changes; strategies transitioned from targeted interventions to universal routines; and expertise migrated from external consultants to internally distributed staff knowledge. In these shifts, participants described a pattern in which the philosophical commitments of the pilot remained stable while the operational forms changed over time.

These shifts illustrate that sustainability did not require fidelity to original implementation design. Rather, accounts suggested that practices endured when educators retained driver-level ownership and adjusted structures to fit changing conditions. Participants consistently framed these evolutions as examples of professional judgment applied within new constraints, rather than as signs of drift. The following subsections examine each evolution pattern in turn.

4.4.1. From Coordinator-Led to Peer-Sustained Professional Development

During the pilot, trauma-informed professional development was primarily organized and facilitated by designated coordinators. These sessions included structured trainings, invited speakers, and formal opportunities for collective learning. Following the conclusion of pilot funding, this centralized model did not continue. Participants consistently described a shift in

which the energy and responsibility for sustaining learning moved from formally positioned coordinators to the informal influence of peers.

Participants described a transition from coordinator-led sessions to peer-supported knowledge exchange embedded within routine professional interactions. Implementation participants emphasized that early strategy diffusion depended on engaging a core group of educators who could influence broader staff culture. One implementation participant reflected: "If I could get this group excited about the training, that would transfer into the rest of the school culture" (IC, p. 10, lines 259–260).

The same participant described how knowledge spread when educators returned from training experiences and shared insights with colleagues: "They came in, and they shared their experience, and that's where I felt like that's where that sort of magic moment was where things started turning" (IC, p. 10, lines 261–262). An instructional practitioner emphasized that peer credibility played a central role in influencing adoption:

> What we found is that some people who are resistant to it at first, once they heard enough of their peers and enough people that they sit and have lunch with and joke around with and play fantasy football with, and go to wine tastings with. Once enough of those people say, "Hey, you know that zone's regulation thing?" … That's the only way you move people like that. That's the only way that you get them to make progress is by having their peers and people they trust say this is worth it, this helped me, this makes me a better teacher, this helps me do my job and actually makes things easier. When you can hammer that point home, that's how you get those teachers too. (SB-P, p. 6, lines 167–176)

An external research participant explained that this type of knowledge diffusion had been part of the original design:

> If there was going to be scale, within that, and if initially there would be an uptake among teachers to begin with. And then if there was an uptake, to what extent would they facilitate the learning of other educators within their schools? (ER, p. 1, lines 15–18)

Across accounts, participants distinguished between the disappearance of centralized coordination and the continuation of professional learning through informal, relational networks. While structured training systems dissolved, habits of peer consultation, modeling, and shared troubleshooting persisted. These findings suggest that distributed expertise replaced centralized leadership. Although this transition reduced uniformity, it appeared to increase organizational resilience by embedding knowledge across multiple individuals rather than concentrating it in a single role. In this way, peer-sustained learning emerged as a core mechanism through which trauma-informed practices continued to evolve once formal structures were removed.

4.4.2. From "Trauma-Informed" Language to "Good Teaching" Framing

Participants described a gradual shift away from explicit use of "trauma-informed" terminology over time, even as underlying practices continued. This evolution was characterized less as abandonment of the framework and more as a reframing of language. This linguistic transition was both pragmatic and strategic, reflecting changing comfort levels as well as a broader effort to align trauma-informed practice with existing instructional identities. Several participants corroborated that the direct use of trauma language occasionally generated resistance among staff. A school-based instructional practitioner reflected:

> If you're in a school or in a district where you think it's worth it to intentionally build relationships with kids because you know that you can't do any of the other ambitious

> goals that you have without that, then that's all trauma-informed is. Or you can call it, connected instructional practices or whatever educational mumbo jumbo you want to have so that people will be so bored by the name that they won't even question it. That's fine, give it a different name. Rebrand it if you need to, because maybe the word trauma is too scientific or in your face or something. Then just call it relationship-based learning. (SB-P, p.15, lines 427–434)

Leadership participants emphasized that the approach was intended to shift how educators understood student behavior rather than excuse it:

> I don't think that we had resistance in the sense of staff who were unwilling to engage or intentionally trying to sabotage the effort. I think that people varied in their capacity to understand trauma-informed care. There's a lot of understanding that we have to work very hard to get people to an understanding that it was not a way for excusing student behavior. It was a different way of thinking about supporting students to get to engage in our school community. (SB-L-1, p. 5, lines 121–126)

A pilot design and advisory participant also framed trauma-informed practices as closely aligned with existing instructional frameworks, particularly those emphasizing teaching for all learners and formative assessment. From this perspective, predictability and transparency in learning environments were described as central to student regulation rather than peripheral supports. This participant explained that when students understand learning goals and receive consistent, low-stakes feedback, they experience greater comfort and emotional regulation, which in turns supports engagement and learning:

> When kids don't know where they're going, don't know what their grade or their score is going to be, isn't predictable, all these things, you know, it can feel. Maybe the flip is

> when they know where they're going and when they're getting pretty consistent, low stakes feedback, that they feel better and more comfortable. So, we know, that's a justification for formative assessment. (SPD, p. 10, lines 277–281)

A community-based advisory participant similarly suggested that effective relational and social-emotional practice often occurs without explicit labeling: "The teachers that do the best SEL (social emotional learning) don't even necessarily use the words SEL" (CO-A, p. 9, lines 259–260). They also noted that the terminology itself may be less important than the underlying practice:

> I totally understand that using certain language can turn people off, and saying something's trauma-informed might make some people not want to do it right off the bat and might feel like it's labeling their kid as traumatized. And there, you know, there's lots of reasons that I've heard people don't like the term trauma-informed. And so, I actually don't think it's as important to use the term trauma-informed. And, again, the focus is on practice. (CO-A, p. 11, lines 296–300)

The school-based implementation participant also emphasized the importance of reducing resistance when introducing new ideas to staff and focusing on broadening equity and TIP work, together: "With equity work we that if you're too calm, you're not going to learn anything. And if you're a little bit activated you could possibly learn a lot" (IC, pp. 14–15, lines 381–383).

A design policy and advisory participant described the building blocks beyond TIP: "I think the word's somewhat problematic. I think that there are these early life indicators that students are in need of, strength-based practices and supports, but it's a spectrum" (SPD, p. 7, lines 183–185). They went on to elaborate the far-reaching benefits of trauma-informed practices: "Even people with very few ACEs scores would benefit from those practices. So, I

think, yeah, I think I think that the number of scores is problematic, and the fact that they're called trauma is somewhat problematic too" (SPD, p. 7, lines 188–190).

This language shift was used as a mechanism for reducing resistance, maintaining staff engagement, and situating the work within existing professional norms. Linguistic evolution therefore appeared to function both as a pragmatic strategy for reducing resistance and as a site of tension regarding how trauma is named and understood. While the shift toward "good teaching" framing appeared to support continuation within school contexts, several participants suggested that reframing also risked diluting explicit attention to trauma, adversity, and inequitable conditions that shape student experience. Considered in combination, these reflections indicate that sustainability was strengthened when trauma-informed concepts were aligned with educator identity and instructional practice, yet linguistic shifts required ongoing consideration of what might be lost or obscured in the process.

4.4.3. From Targeted to Universal Application

Participants described an evolution in how certain trauma-informed strategies were conceptualized and applied. During early implementation, some approaches were perceived as supports for specific students identified as having experienced trauma. Over time, interviews indicated a shift toward applying these strategies more universally. A school-based instructional practitioner described how routine check-ins became embedded as a standard classroom practice:

> If we check-in with every kid as they come through the door or have that be a part of our routine, kids can kind of nonverbally communicate how they're feeling so that I have an idea of what they're bringing into the classroom. And then they can also advocate, without having to say anything. (SB-P, pp. 2–3, lines 56–58)

Participants also described broader institutional diffusion of trauma-informed conversations. An implementation participant reflected: “We got almost everybody in that school to attend at least one. It was like a conversation” (IC, p. 11, lines 286–287). Leadership participants described how early adopters gradually expanded the work throughout the school:

> If you’re talking about any sort of implementation of change or shifting a culture of the school building, like anything that you’re doing, you’re going to have a group of early adopters. And you’re going to have them grow, and then those lagging staff will be the last to come on board. And that’s just how that’s going to work with anything that you’re pushing out in the school. (SB-L-1, p. 8, lines 193–197)

A community organization advisory participant similarly described trauma-informed practices as expanding across schools at varying rates:

> I think there is a train moving that is trauma informed practice, and some schools know it and are on that train, and others, haven’t realized it yet. And, I can’t say with authority that, yes, the pilot was successful, and, no, the pilot wasn’t successful because I think there was already this movement around trauma informed practice that was not created by the pilot, but it was already happening. And, then the pandemic hit that also really caused folks to think about mental health and student support in a different way. But I think that the fact that ODE was interested in trauma informed practice at all is actually something that I see as a success. (CO-A, p. 13, lines 357–363)

This same advisory participant emphasized the broader benefits of trauma-informed implementation when schools determine how to apply these approaches locally:

> I know schools often really like models because they help you adopt it and train, get people on board. And, frankly, that’s not the only way that you can be trauma informed.

> So, I under so I'm not an advocate to say take a model and do that. It's more the practices, being aligned with the overall philosophy. (CO-A, p. 7, lines 177–180)

At the same time, an external research participant noted challenges in demonstrating broad school-wide diffusion through formal evaluation and one model over another: "It was hard to say that it had an impact on the broader school" (ER, p. 4, lines 110–111).

Participants suggested that the shift toward universal framing reduced stigma and simplified implementation. When strategies were presented as beneficial for all students rather than targeted interventions, educators no longer needed to determine who qualified for support. As a result, trauma-informed practices became normalized classroom routines rather than specialized responses, embedding these strategies within standard instructional practice and enabling more consistent enactment.

4.4.4. From External Expert to Internal Expertise

During the pilot, schools relied heavily on external expertise and designated coordination roles to introduce and support trauma-informed practices. Participants described early implementation as dependent on visiting trainers, external consultants, and individuals whose formal responsibility was to guide the work. This early dependence reflected the novelty of the framework and the need for specialized knowledge to launch the initiative.

School-based participants credited early coordinators with helping educators understand and apply trauma-informed concepts. One instructional practitioner reflected: "(Our TIP Coordinator) really helped our staff feel equipped to handle, you know, behaviors in our classroom" (SB-P, p. 5, lines 130–131). An implementation participant also emphasized the importance of training building wide, but also regional trainings to bring together diverse school personnel in order to spread understanding and in turn, spread the knowledge of TIP:

> That was a huge difference to get not just one person, but a team of people and to get the opportunity to get principals there so that they knew what we were talking about. Teachers there, department chairs, counselors, special education, the dean of students there in charge of discipline. To get all those people on the same page and to be able to influence the group. That was the game changer. (IC, p. 8–9, lines 215–219)

An external research participant similarly described the importance of developing internal champions:

> I do think that there's something to be said about the cohort model of having some experts, right? Having a series of experts. I think that there we kind of saw that that has some potential, to have advocates, have champions, and have people. It kind of feels like something that needs quite a bit of training to really become embedded in the way that you do things normally. (ER, p. 8, lines 212–216)

The same participant elaborated on how expertise could spread within schools: "If there's ways to have individuals who are experts in that serve as support for other folks who might be interested" (ER, p. 8, lines 217–218).

A leadership participant reflected on how the conversation about trauma continued after the pilot:

> Talking about it more, I think, is easier now because people understand that equity isn't just, you know, the thing that we talk about. It's so complex. And I think trauma, when we talk about trauma-informed practices, it gives it more language to support the students and families that are impacted. (SB-L-2, p. 6, lines 152–155)

School-based practitioners also described the value of having trauma-informed expertise embedded within the teaching staff itself as the instructional practitioner stressed: "I think there

is a pathway to do it where you just have somebody on your staff that is the trauma informed specialist, and you just do a really good job supporting them" (SB-P, p. 18, lines 508–510). The same practitioner noted that classroom teachers may be particularly well positioned to fill this role: "Maybe there's some value in it being somebody that is on staff and is a classroom teacher that is that person because they can speak specifically to that" (SB-P, p. 18, lines 526–527).

Across these accounts, participants described a clear transition from reliance on external or specially designated experts to the development of internal expertise distributed across teachers, counselors, and instructional leaders. This transition reflected both the internalization of trauma-informed concepts and the recognition that long-term sustainability required embedding knowledge within multiple individuals rather than centering it in one role.

At the same time, participants noted vulnerabilities associated with staff turnover. When trauma-informed leadership rests primarily in the expertise of individuals rather than in formal structures, institutional knowledge may diminish if those individuals leave. Participants suggested that this dynamic created a tension between the benefits of distributed internal expertise and the risks associated with its portability.

Considered together, these reflections indicate that the evolution from external experts to internal expertise strengthened sustainability by embedding trauma-informed knowledge within the school community yet also introduced challenges in maintaining continuity when personnel changed. This shift mirrored broader patterns of adaptation, in which the longevity of trauma-informed practice depended on internal capacity rather than continued external scaffolding.

4.4.5. Summary: Evolution Patterns

Practices that evolved rather than disappeared shared several distinguishing features. They retained construct-level continuity while permitting structural modification. Core principles

remained recognizable, yet formats, leadership structures, language, and delivery mechanisms shifted over time. Participants emphasized that such flexibility allowed the work to remain relevant under changing organizational and instructional conditions.

Across interviews, evolution was associated with flexibility rather than fidelity to original implementation design. Practices endured when educators were able to reinterpret and adapt them in response to contextual changes, including leadership transitions, technological developments, staffing mobility, and shifting student needs. Participants described this interpretive agility as a defining characteristic of sustained trauma-informed practice, contrasting it with components that required fixed structures or ongoing external support.

Unlike discontinued components, evolving practices did not depend on sustained funding or formal coordination. At the same time, they did not remain static. Adaptation appeared to function as a mechanism of survival, allowing trauma-informed principles to persist in modified forms even as pilot-era infrastructure dissolved. Participant accounts consistently portrayed evolution not as drift away from original intentions but as the process through which core principles were preserved in usable and contextually appropriate forms.

Considered in combination, these reflections illustrate that sustainability depended less on preserving pilot-era structures and more on educators' capacity to adapt core functions across changing conditions. Evolution functioned as a pathway for continuity, allowing trauma-informed practices to remain integrated into daily routines despite shifts in personnel, technology, and school environments.

4.5. Domain 4: The COVID-19 Pandemic as Durability Test

Having described patterns of persistence, disappearance, and adaptation across the 6-year period, participants also reflected on how these dynamics were tested during the COVID-19

pandemic. The pandemic, which began in March 2020 approximately 1 year after pilot conclusion, functioned as an unplanned stress test of trauma-informed practice durability. Participants did not describe the pandemic as creating trauma-informed practice. Rather, they described it as revealing what had already been internalized, what depended on physical structures, and what could withstand disruption. Participants emphasized that the pandemic made visible the degree to which trauma-informed principles had become embedded in educator practice prior to the crisis.

In this analysis, COVID-19 is treated as a naturalistic stress test through which participants retrospectively evaluated the durability of trauma-informed concepts and practices. These reflections are not presented as objective measures of pandemic response effectiveness, but as interpretive assessments of what knowledge, language, and practices proved adaptable under conditions of crisis and constraint. Participants described the pandemic period as illuminating the difference between practices that required structured coordination and those that had become part of everyday instructional reasoning.

It was consistently reported that practices grounded in relationships and foundational understanding, many of which had already evolved prior to the pandemic, proved most resilient. The pandemic amplified student stress and anxiety, increasing the relevance of trauma-informed approaches even as institutional capacity diminished. Across reflections on both strategy and structure, participants suggested that the crisis highlighted the central role of relational connection, emotional attunement, and brain-based understanding at a time when formal structures were least available.

4.5.1. Foundation That Enabled Pandemic Response

Participants collectively emphasized that elements of the trauma-informed work established during the pilot created a foundation that helped educators respond to the unprecedented challenges of the pandemic. School-based practitioners highlighted the importance of relationship-centered practices developed during the pilot. One instructional practitioner reflected:

> The ones that have the hardest time, and who probably had the hardest time during COVID. Having that relationship, and that empathy and that care as a foundation, you know, really, I think, allowed us to engage students better than if we didn't. (SB-P, p. 10, lines 292–295)

Leadership participants similarly described applying trauma-informed principles to support both students and staff during the transition to remote learning:

> (The high school) was learning all of this about trauma-informed practices in the lens of students. And what we were able to do is when we had to go online, then we saw a lot of stress from our adults as well. And so, as an admin team, we were able to apply some of that. And so, the conversation kind of started shifting into adult care as well so that they could care for our kids. So, I think that the timing was really beneficial if you take the silver lining of all of that time. (SB-L-2, p. 5, lines 117–122)

School leadership participants also emphasized the role of existing structures that had been developed during and pre-pilot period and helped navigate the disruption associated with virtual learning:

> We already had an understanding of how students can be impacted in their own social emotional learning and growth. We already had a lot of structures for, you know, one of

> the things that came out of strategies that we were using was putting in place advisory. And we already had what was called a Power Peers Group where they were pushing out social emotional learning lessons, student led to the student body. We had an advisory hub where we were working on community circles and, teachers' kind of being that hub for a certain group of students where they were monitoring, almost like an MTSS system. And we already had all of those structures in place. So, when COVID happened, I think that that really helped us weather a lot of the fallout from students being in a virtual setting would have been much more difficult, if we didn't already have that staff understanding. (SB-L-1, p. 6, lines 147–156)

The school-based implementation participant described how pandemic conditions accelerated the need to prioritize relational and social-emotional support:

> But then we moved in, okay, how do we support people? And that was like a whole other chapter of work that we did around social emotional learning, restorative justice, conversations with teachers, conversations with staff. And when we kind of flipped the script a little bit from SEL, from SEL that was pulled off the shelf to SEL that was rooted in real conversations with students and staff asking them, "what do you want to talk about?" (IC, p. 18, lines 467–473)

An external research participant also reflected on how educators who had been directly involved in the pilot appeared better prepared for these challenges:

> I think that the teachers who were involved in the cohort and those that were really tightly connected were very well prepared for all this and could help move that forward. But how much they were able to help the whole school during that particular time. (ER, p. 8, lines 197–199)

Community-based participants similarly suggested that the pandemic broadened public awareness of the importance of mental health and student well-being with the community organization advisory partner, stating:

> I think I have seen some models that I am less impressed with than others. And I also think they're all trying to chip away at this bigger thing that there's no one perfect right way to do it. And so, as each school determines these are the things that we're going to do to try to have our practices be more trauma informed, I think that Oregon students benefit. (CO-A, p. 6, lines 170–173)

A policy design advisory participant shared the practices as foundational to what came next:

> I can't imagine they wouldn't be better prepared. I mean, just spending that time on the self-reflection side of it has to build something within those folks. I have no doubt about it. I don't know how easy that is to prove, but I think when you invest time like that into educators, it has an effect. (SPD, p. 10, lines 256–259)

Across accounts, participants described the pilot not as determining how schools responded to the pandemic but as providing meaning-oriented, relational, and structural groundwork that accelerated educators' ability to interpret and respond to emerging needs. Relationship-centered practice, brain-based explanations of stress, and existing support structures functioned as resources that educators drew upon when institutional capacity was strained. These reflections suggest that the durability of trauma-informed principles during the pandemic depended on the degree to which they had been internalized and embedded prior to disruption, rather than on the presence of formal pilot-era structures.

4.5.2. Which Practices Proved Most Resilient

Participants consistently identified relational and concept-driven practices as most durable during remote learning. Instructional practitioners described continuing practices centered on regulation, breaks, and student communication even as instructional formats shifted. Across these accounts, participants emphasized that trauma-informed routines grounded in relationships, emotional awareness, and practice-logic understanding translated more readily into remote and hybrid contexts. These practices relied on attunement, communication, and predictability rather than specific materials or physical proximity, making them adaptable to new modalities.

Conversely, practices that depended on coordinated cohort meetings, in-person collaboration, or specialized materials were more difficult to sustain during isolation. Participants suggested that while the relational principles underlying trauma-informed practice transferred across modalities, the structural mechanisms that had supported implementation during the pilot did not. Cohort convenings, biometric demonstrations, and facilitated group processes proved less adaptable to virtual environments, reflecting their reliance on coordinated time, shared space, and formal facilitation.

Viewed collectively, these reflections indicate that the practices that endured during the pandemic were those that had already become internalized and routinized prior to disruption. The capacity to engage students relationally, maintain predictable check-ins, and support regulation proved resilient in conditions of crisis, while structurally dependent components were more vulnerable to collapse.

4.5.3. Increased Stress and Need Post-Pandemic

Participants emphasized that student stress levels increased significantly during and after the pandemic, intensifying the need for trauma-informed approaches. One school-based instructional practitioner described observable changes in student behavior and engagement:

> We're seeing behaviors rise. We're seeing attendance go down. We're seeing more kids who missed that formative part of their education who maybe don't know how to be a student, how to regulate, how to handle adversity or challenging things, like, when they come up. (SB-P, p. 11, lines 318–321)

The same practitioner reflected on how this developmental disruption required educators to shift toward a more relational approach: "I think now, especially as we're seeing kids come in without the regulatory skills, without the academic skills, without really knowing how to be students in some cases, you have to take that person-centered approach" (SB-P, p. 12, 337–339).

Community-based participants emphasized that adult regulation also became an important component of supporting students, with a community organization partner sharing:

> There's not enough time to do all the stuff that people have to do in a school. Schools are so underfunded. People are so underpaid, and then that brings a whole different level of stress and anxiety. And if you're not in a calm headspace, how do you instill calm headspaces to other people? (CO-P, p. 14, lines 398–401)

Leadership participants similarly described the emotional toll experienced by educators during the pandemic. At the same time, participants noted shifts in staff priorities following the pandemic:

> Teachers have a lot, and they're much more driven to self-protect now. I hear a lot more often about work-life balance and the social-emotional stuff I think post-COVID. There

> were a lot of staff attitudes that have changed around just protecting the nature of the work and feeling like I have to just let go of some things. (SB-L-1, pp. 9–10, lines 251–254)

The implementation participant also connected these experiences to the brain-based concepts introduced during the pilot: “The more stressed you are, the more your brain is moving into survival mode, and it impacts your memory. It impacts your ability to process information. It impacts a lot” (IC, p. 11, lines 293–295).

Accounts suggested that the pandemic intensified existing student needs while simultaneously straining educator capacity. Participants described a widening gap between rising student stress and limited institutional resources. Student needs intensified at the same time that educator capacity was strained by workload, emotional fatigue, and changing expectations. Viewed as a system of participant reflections, the pandemic amplified preexisting challenges while heightening reliance on relational connection, emotional attunement, and the brain-based understanding introduced during the pilot. These practices remained central because they were embedded in educator judgment rather than dependent on formal structures that were difficult to maintain during crisis conditions.

4.5.4. Missed Opportunity for System Transformation

Some participants reflected on the pandemic as a moment when broader system change might have been possible but ultimately did not occur. One community organization partner expressed frustration that the disruption did not lead to deeper structural reflection:

> I do wish that we had been able to pivot after COVID. You know, to me, that seems like a really great time to really look at what we’ve been doing and what has not been

> working out, and pivot. And we didn't. We're kind of back to where we were. (CO-P, p. 15, lines 427–430)

A school-based leadership participant described how pandemic conditions shifted school priorities toward immediate operational challenges: "We still had some strong systems, but it was just the energy, shifted because we were having to triage through something that was so difficult, just getting used to school again and how we do school" (SB-L-1, p. 9, lines 241–243). An implementation participant also reflected on tensions between accountability metrics and broader educational outcomes during this period:

> The basis for this was chronic absenteeism, they wanted that to go down. It didn't go down. In fact, it has increased a little bit. But what they didn't want to include was our graduation rates. I don't know if you're aware of those, that they did improve. They improved by, I think by the end of the pilot, it improved by about 6% overall for all students. That's pretty remarkable, and I've never seen that before. But to see kids with economic challenges, their graduations go up by 13%, 12%, even higher, that's great. (IC, p. 16, lines 431–436)

Across accounts, participants described a tension between classroom-level adaptation and broader systemic inertia. While individual educators leveraged trauma-informed principles during crisis, larger institutional structures tended to revert to pre-pandemic norms once immediate disruptions subsided. Participants suggested that the pandemic revealed both the potential and the limits of trauma-informed reform. Practices that were already internalized continued through educator judgment, but the absence of systemic redesign meant that deeper structural transformation did not occur. Seen collectively, these reflections reinforce a broader pattern across interviews: crisis conditions amplified the relevance of trauma-informed

principles, yet the opportunity to embed these principles into durable system structures was not fully realized.

4.5.5. Summary: COVID-19 as Test of Durability

Across interviews, participants described the pandemic as illuminating rather than redefining trauma-informed practice. COVID-19 clarified which elements of the pilot had been internalized deeply enough to withstand disruption and which remained tethered to specific structures. Practices grounded in relationships, emotional attunement, and brain-based understanding transferred across formats. These routines persisted because educators could enact them without special tools or coordinated systems.

In comparison, practices that relied on cohort convenings, in-person facilitation, or specialized materials proved more vulnerable. Participants described how the absence of formal structures exposed the limits of approaches that required sustained coordination. The crisis environment sharpened distinctions between practices that had become habitual and those that still remained tethered to pilot-era scaffolding.

Participants also reflected on how the pandemic expanded attention to adult wellbeing, shifting trauma-informed conversations beyond student behavior to include stress, regulation, and emotional capacity among educators themselves. This extension of the framework did not derive from new training but from applying existing concepts to new conditions.

Viewed collectively, these reflections suggest that the pandemic operated as a naturalistic test of framework-level durability. Trauma-informed practices persisted when they were simple, relational, and internalized, but faltered when they required structural maintenance. The period underscored that long-term sustainability depended on embedding trauma-informed principles

into professional identity and daily routines rather than preserving the pilot's formal implementation architecture.

4.6. Domain 5: Sustainability Conditions That Enabled Continuation

Across participant interviews, specific conditions emerged as critical for sustaining trauma-informed practices beyond the conclusion of formal pilot support. These conditions differed in meaningful ways from those that enabled initial implementation. Participants consistently described sustainability not as the maintenance of pilot structures, but as the continuation of practices that could survive without external scaffolding. Six interrelated conditions appeared central to long-term continuation, each reflecting the degree to which practices could be simplified, distributed, culturally absorbed or adapted without relying on specialized roles or formal coordination. While earlier domains describe what persisted, disappeared, or evolved, this domain synthesizes why certain practices endured by identifying cross-cutting sustainability conditions.

4.6.1. Simplicity and Low Resource Requirements

The most consistent sustainability condition across participants was simplicity. Practices that required minimal funding, limited training, and little additional time were most likely to endure. The emphasis illustrated in participant accounts showed that many effective strategies were simple routines rather than complex interventions, with a school-based instructional practitioner explaining: "There are so many little things you can do that have an impact that don't take any time. Don't take any work" (SB-P, p. 8, lines 228–230). The same practitioner emphasized that trauma-informed practices were often grounded in everyday instructional decisions rather than specialized resources: "There are these best practices, that have trauma informed roots that don't take money. They don't take a ton of time" (SB-P, p. 14, lines 408–

409). An implementation participant similarly described intentionally introducing strategies that teachers could immediately apply within existing classroom routines: “The first thing I did when I saw this feedback was okay, I’ve got to give them something, and it’s got to be something that they could use. And it was just square breathing” (IC, p. 2, 48–51).

Participants emphasized that once grant funding ended, schools reverted to baseline resource constraints. Practices that depended on equipment, specialized personnel, or ongoing professional development could not be maintained. Alternatively, strategies embedded into routine classroom practice required no additional allocation and therefore persisted. Accounts suggested that sustainability depended less on securing continued funding and more on designing practices that did not require it.

4.6.2. Peer Influence and Organic Spread

Participants consistently emphasized the role of peer influence in sustaining trauma-informed practices after the pilot ended. Rather than relying on formal coordination structures, knowledge and strategies continued to spread through informal professional networks.
An instructional practitioner highlighted the importance of trusted colleagues in encouraging practice adoption and how small groups of educators could gradually influence broader cultural shifts within a school: “You would hope that that 5 would grow to 10 and grow to 15... And that’s how you’re building shifts” (SB-P, p. 16, lines 462–463).

A school-based leadership participant reflected on how the work developed organically within the school community: “(The high school) felt way more organic, and it was almost as if the entire school was bought into it” (SB-L-2, p. 3, lines 65–66). An implementation participant also described how the cohort model supported this diffusion by leveraging peer credibility:

> We had a coffee chat, and my cohort team would attend. They would get people to attend that I thought would never come to a coffee chat. Like, if it was just me, they're not attending. But because this teacher who's been in the district or been at the school for 15 years and has made great relationships has bought into it, she's able to get this. (IC, p. 13, lines 329–332)

A community organization advisory participant emphasized that visible results also encouraged continued engagement:

> You're always going to have teachers that don't want to buy in. And so, you know, I think that that is definitely real. I think that the more that it's shown to work, by trying different things, the more interest people will have on doing it. (CO-A, pp. 10–11, lines 287–290)

Interviews indicated that peer credibility and organic diffusion played a central role in sustaining trauma-informed practices after formal pilot structures ended. Rather than depending on centralized leadership, the work continued through relational networks of educators who shared strategies, modeled approaches, and gradually influenced school culture.

4.6.3. Administrative Cultural Support Without Dedicated Coordination

Although dedicated trauma-informed coordinator positions were not funded by the state pilot beyond the study period, multiple participants described administrative cultural reinforcement as a partial substitute mechanism for continuation. However, this substitution was neither automatic nor uniformly effective.

School-based participants described how, in the absence of a full-time coordinator, administrators maintained emphasis by embedding trauma-informed language and expectations into routine communication. Concepts such as regulation, relationship-building, and brain-based

understanding of stress were referenced in staff meetings, incorporated into onboarding processes, and reflected in informal feedback conversations. One instructional practitioner reflected on the persistence of practices even after formal funding ended:

> Even if we're not dedicating funding or something to it necessarily anymore, the strategies that I think we really emphasized during that period of time remain with the staff who are still here. Do we need to have funding attached to trauma-informed practices for it to make a difference? (SB-P, p. 4, lines 105–108)

Leadership participants similarly emphasized the persistence of cultural shifts within the school community:

> I would very strongly say that I think that the paradigm shift that happened for the staff is still in place there. The approach and the care by which staff approach students have shifted in a way that has been sustainable even with changes in both money streams and in leadership at the school. (SB-L-1, p. 7, lines 175–177)

An implementation participant also highlighted contextual factors that supported continuation within specific school settings: "I just feel like the stars aligned in so many ways for (the high school), that it led to these really astonishing results that we got. Improve the implementation science" (IC, p. 16, lines 421–423).

These reflections suggest that administrative cultural reinforcement can partially sustain trauma-informed norms after formal coordination structures dissolve. However, sustainability through cultural messaging remains sensitive to leadership stability and local conditions rather than on institutionalized policy. This perspective shifts the analysis from cultural reinforcement to structural vulnerability. While administrative messaging can sustain norms in the absence of dedicated coordinators, it is dependent on individual leadership commitment rather than

institutionalized policy. Administrative cultural reinforcement can partially substitute for formal coordination, but its durability depends on leadership stability and resource realities. Sustainability at scale therefore requires models that do not hinge solely on individual champions or grant-funded positions.

4.6.4. Multi-Year Timeline and Patience

Participants emphasized that sustainability unfolded over years rather than within the formal pilot window. Multiple participants reflected on the slow pace of culture change within educational systems. Trauma-informed implementation was an iterative, cumulative process that required time, repetition, and ongoing interpretation rather than immediate transformation.

One instructional practitioner emphasized the importance of sustained effort during early implementation: "You have to give it time" (SB-P, p. 19, line 540). The implementation participant similarly described how adoption among educators could take years:

> I had written this guy off. I'm like, he's just one of those that is never going to do it. And 3 years later he comes around to get a piece of knowledge that was important for him at that moment. And so, I am just totally convinced that we need to give people multiple opportunities. (IC, p. 13–14, lines 355–358)

A community organization advisory participant similarly highlighted the importance of continued deepening of trauma-informed practices over time:

> You don't even need to say its trauma informed, but you might want to be just creating a better sense of belonging or integrating more student voice in what you're doing or, coming up with a discipline policy that's more restorative and how you're thinking through it. You know? All of those things would be on the path towards being more trauma informed. (CO-A, p. 11, lines 308–311)

Accounts suggested that sustainability required patience and long-term, multi-year commitment. Practices that appeared fragile during early implementation sometimes solidified later, suggesting that evaluation windows may not align with the timeline required for cultural embedding. Participants consistently emphasized that meaningful culture change requires multi-year timelines and that sustainability depends on recognizing and honoring this reality of extended trajectories through which trauma-informed practices becomes embedded, rather than expecting immediate transformation.

4.6.5. Alignment with Educator Values and Identity

Participants repeatedly described the importance of framing trauma-informed practices as aligned with professional identity. When positioned as extensions of good teaching, practices were integrated with less resistance. When framed as separate initiatives or as lowering expectations, resistance increased. This alignment facilitated voluntary continuation. Teachers sustained practices they believed were consistent with their professional commitments.

School-based practitioners frequently framed trauma-informed practices as strengthening their teaching rather than adding new responsibilities. An instructional practitioner explained the relational framework between the practice and the academic outcomes: “Caring about them as a person is something that I think you should do anyway, but there are academic benefits to it as well” (SB-P, p. 8, lines 217–218). The same practitioner reflected on how trauma-informed principles aligned with educators’ broader instructional goals:

> It’s worth it to me. So, if you have in your school, in your district, where you think it’s worth it to intentionally build relationships with kids because you know that you can’t do any of the other ambitious goals that you have without that, then that’s all trauma-informed is. (SB-P, p. 15, 427–430)

The implementation participant similarly described how trauma-informed approaches provided educators with interpretive frameworks for understanding student behavior:

> Power differentials, kids with trauma and how they react. And it spoke to the different, it gave them context for what they were seeing in the classroom, and it made them feel hopeful that there were things, interventions, things that they could do. And if I could get this group excited about this, that would transfer into the rest of the school culture. (IC, p. 10, lines 256–260)

Leadership participants also framed trauma-informed practice as central to school culture rather than as an isolated initiative:

> What we were able to get to in that setting was people understanding this is how we define the culture of our school. This is a driving, you know trauma-informed practice with Avid. That was just how we do business and people just knew this is how we're going to respond to kids. This is why we do it. And people knew that this was just kind of the way it was going to be. (SB-L-1, p. 8, lines 204–208)

Another leadership participant emphasized that educators who embraced trauma-informed practices often maintained high expectations for students:

> I would say that the teachers who were really bought into it had very high expectation for students. So, for them, it was more of what can I change as far as my interactions with these kids to help them become more comfortable and realize, you know, that the classroom environment that I, as the adults, set up impacts their learning? (SB-L-2, p. 8, lines 215–219)

A community organization partner described similar relational commitments within youth-serving environments:

> We want instead of just doing something and enabling somebody, we want to help them feel that they're empowered to take action for themselves, and we can help guide them. I always want people to be, you know, safe. I want them to trust me. I want us to make sure that we have good boundaries and a good solid relationship so that there's that trust. What I always tell the staff that I supervise is we're just one more trusting, askable adult. And the more that any youth has, the better. It's just their protective factors that help support them. (CO-P, p.13, lines 347–353)

A community organization advisory participant also noted that the broader movement toward trauma-informed practice was uneven across educational settings, but paramount in practice: "I think there is a train moving that is trauma informed practice, and some schools know it and are on that train, and others haven't realized it yet" (CO-A, p. 13, lines 357–358). Participants described this alignment with educator identity as a core sustainability mechanism. Practices that reinforced teachers' beliefs about care, connection, and instructional effectiveness were more likely to be carried forward once formal structures ended.

At the same time, community participants noted that reframing trauma-informed practice as "good teaching" risked obscuring structural and historical dimensions of trauma. While value alignment supported sustainability, it also introduced philosophical trade-offs by shifting attention away from systemic context toward individual practice. Sustainability through value alignment therefore involved both pragmatic benefits and interpretive tensions.

4.6.6. Flexibility and Adaptation

Participants consistently identified flexibility as a critical sustainability condition. Practices that allowed modification over time were more likely to endure, whereas rigid protocols requiring strict fidelity tended to diminish once formal supports ended. An

instructional practitioner emphasized the importance of adapting practices to the needs of individual students and classrooms. One practitioner explained:

> Good educators are going to be responsive to the students that are in their school and the families that are in their school. And they're going to change and be like, okay. Well, I'll keep this part of the curriculum. But I think for this kid, I'm going to do this. And for this kid, I'm going to do this…Having you need to have something be very localized, in my opinion, to be the most responsive and beneficial for your specific school community. (SB-P, pp. 4–5, lines 148–154)

A community organization advisory participant similarly emphasized that sustainability depended on aligning practices with guiding principles rather than rigid models:

> It takes it from having 1 champion to having multiple champions to being externally developed from the awareness of trauma to really integrate, trauma informed practice and everything that you do so that it's embedded. It's not dependent on one person who leads. (CO-A, pp. 4–5, lines 115–118)

A pilot design advisory participant also reflected on how implementation realities often required adaptation based on staff needs:

> We had the staff fill out that same survey, and the staff data was not all that different from the students at that high school or in Oregon, meaning that there were a whole lot of people with a high ACES score. And I'm one of them. And so that was a huge learning, and people were struck by that. And as they started to talk about it, especially at (one high school is my recollection, but I think at both schools, they were unearthing a whole lot of stuff that they had never dealt with. So, the 1st year ended up being little, if any, student engagement and much more staff engagement. (SPD, pp. 5–6, lines 140–146)

In some cases, these dynamics created risks when staff had not yet processed their own experiences, as shared by the same pilot design advisory participant:

> Their need to process their own trauma was so important that we couldn't even begin the 1st year to talk about students because they would actively retraumatize kids because they themselves hadn't processed a lot of their own trauma and responses to it. (SPD, p. 5, lines 135–137)

Leadership participants similarly described adapting trauma-informed strategies to fit school culture: "We were working underneath the strategies to make them fit within the culture of our building" (SB-L-1, p. 4, lines 95–96). Another leadership participant emphasized the importance of planning for sustainability when allocating resources in decision-making in general:

> I think what a lot of districts and schools do is that they use it towards limited resources for one year, then you see an improvement. And then those resources go away, and then it stops. So, I am looking at what can we do to build in longevity to help with student connection and understanding. (SB-L-2, p. lines 256–259)

The implementation participant also described tailoring support to the needs of different staff members:

> Everyone needs something different, and it fits in nicely with the targeted universalism. Some people need coffee chats, some need weekly emails, some people need it and we have taken an equity approach to it. You know, there's some communities that need something different. (IC, p. 15, lines 401–405)

These reflections underscore an important distinction between construct-level fidelity and procedural fidelity. Participants described maintaining core principles while modifying format,

delivery, and integration into daily routines. Participants did not describe adaptation as dilution. Rather, they framed it as preservation of underlying principles through contextual modification. Practices that survived were those that could bend without breaking. Permission to adapt functioned as a protective factor for long-term continuation. Sustainability required flexibility at the procedural level while maintaining coherence at the construct level.

4.6.7. Summary: Critical Sustainability Conditions

The body of interviews emphasized that sustainability depended on simplicity, cultural reinforcement, peer diffusion, value and identity alignment, adaptability, and long-term timelines. These conditions differed meaningfully from implementation factors documented during the pilot period. Sustainability did not require maintaining original structures. It required practices to become manageable, meaningful, and internally owned.

4.7. Domain 6: Distinguishing Implementation from Sustainability Factors

A central analytic finding of this study is that implementation and sustainability functioned according to related but distinct logics. During the pilot, implementation depended on formal coordination, training structures, external expertise, data tracking systems, and organizational capacity. These elements were effective for initiating practice adoption. Participants described this phase as resource-intensive, structured, and reliant on designated personnel to introduce, model, and monitor trauma-informed strategies.

However, these same elements did not predict long-term continuation. Participants consistently distinguished between what enabled uptake and what enabled endurance. Practices persisted when they could be simplified, adapted, and integrated into routine professional judgment rather than maintained through formal apparatus. Sustainability depended on

internalized understanding, cultural embedding, relational networks, and alignment with educator identity rather than on the structural supports that characterized early implementation.

4.7.1. Participant Perspectives on TIP Study Implementation

Participants' reflections on the 2016 to 2019 pilot period aligned with findings documented in the Oregon Department of Education (ODE) final report (ODE, 2019). Implementation during the pilot was intentionally structured around capacity-building, formal coordination, and measurable uptake. School-based practitioners described the importance of dedicated personnel and coordinated learning structures during early implementation. One instructional practitioner reflected on the role of the school's trauma-informed coordinator:

> I think if we didn't have (our TIP Coordinator) here and we didn't have that resource who was sharing information, sharing research, sharing testimonials from students about the impact that it has, hearing from our peers, you know, as, like, a cohort of here's things that we're trying, here's the positive impact. (SB-P, p. 4, lines 109–112)

The implementation participant emphasized the importance of financial resources during the pilot period:

> The way that they set it up with a coordinator with $200,000 to the school to pay for staff and resources, that was really a big difference. That was a game changer. To give people that wanted to experiment, to try things, money to do it. (IC, p. 8, lines 210–211)

An external research participant described how the evaluation focused on understanding how implementation unfolded across pilot sites: "A good example of that would be the fact that the two cohorts were really developed in two different ways. That it's led by, open to two different coordinators, two different strategies for those" (ER, p. 3, lines 76–78). The same researcher reflected on how these differences complicated comparisons across sites and may in

fact have not been the pilot's intent: "My understanding is it wasn't. I think it was supposed to be closer to the open enrollment application style of one of the high schools" (IC, p. 3, lines 80–81).

A community organization advisory participant described how advisory committee meetings provided updates on implementation progress across sites along with their limited reach and scale in actual implementation of the study:

> The committee had a lot of understanding that implementation, particularly in year 1, and year 2 was slow and context dependent. And so, when we heard presentations, we heard how different sites were progressing and what each of the sites were doing. I believe there was, question and answer, so the committee was involved in understanding the work. But I wouldn't say there was a big active advising role that we were not there to, like, really advise the work on either site. I wouldn't say that that was the role that we played. (CO-A, pp. 3–4, lines 84–89)

This same participant also expanded upon the committee's role within the context of the pilot sites:

> I remember there being some check-ins from the pilot sites about the role and how the work was progressing at the pilot sites. I don't remember that the committee did a lot of work to design the pilots. I really think that happened outside. (CO-A, p. 3, lines 76–79)

A community organization partner described their participation primarily as providing input based on their service delivery experience:

> My involvement with that TIP project was really just coming in and people asking us questions and us kind of talking about our service delivery model, which is predominantly, I probably was sharing a lot about the relational worldview model as

> opposed to the typical linear model that's used in social work. (CO-P, p. 6, lines 166–169)

A clear disconnect emerged between school-level implementation and advisory committee engagement. While schools described intensive on-the-ground work, dedicated roles, and daily instructional experimentation, advisory participants reported that their role was largely informational rather than directive. The advisory committee perceived limited influence over site-level decisions or implementation strategy, underscoring the extent to which the pilot operated as a school-centered initiative despite its multi-stakeholder design.

A policy design advisory participation described how the pilot itself was shaped by broader political and administrative structures during the early stages and the dedicated years of the pilot were stalled by the very people at the foundational level of the practices themselves, the educators:

> The learning of the first year was novel because our logic model and the intended activities basically said that six months after we'd hired a coordinator at the school level and had begun to train staff we'd begin to look at their practices, that we'd be talking to students through advocacy groups or student government, that we'd be talking to students about trauma in year one. And in fact, what we found was that we couldn't even begin the 1st year to talk about students because they would actively retraumatize kids because they themselves hadn't processed a lot of their own trauma and responses to it. (SPD, p. 5, lines 130–137)

Together, these reflections illustrate the structured and resource-supported environment that characterized the pilot implementation phase. Implementation during the pilot depended on coordinated leadership, dedicated personnel, funding, formal learning structures, and evaluation

systems designed to document adoption and progress. Participants consistently noted that these elements were critical for initial uptake, even as advisory participants' limited influence revealed a gap between system-level design intentions and school-level implementation realities.

4.7.2. Participant Perspectives on Sustainability Versus Implementation

By contrast to implementation factors, participants identified substantially different drivers of long-term sustainability. Participants consistently described sustainability as dependent on simplicity, adaptability, teacher choice, cultural embedding, and peer influence rather than externally provided structures. At the same time, accounts diverged along role lines: school-based participants emphasized the persistence of day-to-day routines and cultural norms, whereas external and advisory voices stressed the need for codification, policy anchoring, and structural embedding.

A school-based instructional practitioner emphasized the importance of simplicity in sustaining practices over time: "That doesn't take any prep. That doesn't take any time for you. That's just a part of your routine, and kids come to expect it" (SB-P, p. 8, lines 224–225). The school-based implementation participant also described how educators developed greater awareness of student regulation needs over time:

> It was because in the mainstream classes' teachers understood what dysregulation was like. We created spaces where they could be successful and where they didn't because we had teachers that now were understanding and knowledgeable about what stress looks like and could create plans and could help kids. (IC, p. 21, lines 563–566)

Leadership participants similarly described enduring shifts in how educators approached student relationships: "We took our trauma informed team and sort of shifted that into the

restorative practice team, which grew and grew and grew over time. And so that kept some sustainability, I think, even after the grant ended" (SB-L-1, p. 7, lines 170–172).

Another leadership participant observed that trauma-informed concepts continued circulating informally among educators: "I would say kind of like what you had said, the residual effects of, you know, the teachers were still talking about it and still referencing, you know, what they use" (SB-L-2, p. 8, lines 204–205).

These school-based reflections framed sustainability as the continuation of simple, concept-driven routines internalized by educators and reinforced through informal culture, rather than as the maintenance of formal structures. An external research participant, meanwhile, reflected on the importance of institutionalization in supporting long-term continuation:

> What needs to be this formal process of engaging the cohort, but then the pieces of institutionalization, so writing policy at the school level, rewriting, making it part of the professional learning communities. Those folks are making it come up during those times that feel more embedded as opposed to just kind of relying on the teachers to carry those things through after that....my impression was that it was a good start, and it was starting to happen and starting those conversations and starting to do that, but without some kind of codification or institutionalization. (ER, p. 7, lines 178–185)

A community organization advisory participant emphasized that sustainability often depended on smaller-scale initiatives within individual schools rather than large resource-intensive programs:

> I think that's just the structure of pilots in general and it's a super common mechanism for kind of getting an idea out there. And, also, I think it might be problematic in the long term in terms of long you know, system implementation. So, I haven't stayed highly

> involved with those with the schools that were part of the pilot, and so I don't know what happened. I do know that a lot of the COVID funding went to student support that in many ways supported schools to do work that was trauma informed or was really focused on supporting students' individualized needs and that money was never planned to be long term. So, there was a cutoff date for that as well. (CO-A, p. 5, lines 127–134)

A community organization partner also emphasized the importance of reciprocity and meaningful engagement in sustaining collaborative initiatives: "Being able to lead with something tangible is good for everybody involved. And so, when people are being asked for information, there should be something given back. The time should be valuable, and the voices heard" (CO-P, p. 10, lines 281–284).

Such perspectives cohere around the idea that there was a salient cross-role disconnect in how sustainability was understood and pursued. School-based participants described endurance as a function of simple routines, educator judgment, and cultural memory. External and advisory voices emphasized codification through policy, PLC structures, and role clarity as safeguards against attrition, particularly amid turnover. Community perspectives drew attention to reciprocity and locally initiated efforts as the practical substrate of sustainability, while also implying that large programmatic designs would likely recede once funding ended.

In sum, participants' 6-year reflections indicate that pilot-era implementation factors did not map cleanly onto sustainability. From the school vantage point, practices persisted when they were simple enough, meaningful enough, and already woven into everyday work. From external and advisory vantage points, durability required institutionalization to prevent erosion and ensure continuity beyond individuals. Both perspectives converge on the same implication:

sustainability is not the preservation of structures, but the ongoing capacity to enact core functions either by culture and routine or by codified policy when external scaffolding is gone.

4.7.3. Key Differences Between Implementation and Sustainability

Participant reflections revealed several critical distinctions between the conditions that enabled initial implementation and those that supported long-term continuation. First, implementation benefited from concentrated structural support. During the pilot, trauma-informed coordinators, formal cohort structures, scheduled PDSA cycles, and external expertise allowed for layered and sometimes complex approaches to trauma-informed practice. Complexity was manageable because scaffolding was present.

However, drawing on the composite of participants, meaningful disconnects in how implementation was understood, experienced, and interpreted occurred. What appeared coordinated and resource-supported from some vantage points was experienced as fragmented, opaque, or limited from others.

A community organization advisory participant also reflected on the structural characteristics of pilot programs and studies within government systems: “I think piloting something is a typical structure in government where it sets up a few people to get a couple large resources that are usually unsustainable, and there’s not really a plan for greater rollout” (CO-A, p. 5, lines 122–124). A community organization partner also noted that from outside the school system, the long-term trajectory of the pilot was not always visible:

> I think that happens a lot and that information doesn’t circle back to the people that were part of that survey or part of that information. So, I appreciate you reaching out because I didn’t know what happened with those TIP things. (CO-P, p.10, lines 258–260)

These perspectives diverged sharply with accounts from school-based participants, who described the daily work of implementation as highly structured and time-intensive. School-based implementation participants emphasized the limits of directive implementation strategies: “The thing is, you can’t make people do this. You just got to say, hey, here’s time” (IC, p. 12, lines 325–326).

An external researcher also described disconnects between design intention and implementation reality, explaining the site variation undermined the researcher’s ability to compare outcomes:

> I think also having those two different ways of selection process made it hard to give a really solid social network analysis, it questioned challenges and made it hard to give a really strong recommendation for this would be the way that you would do this in practice. (ER, p. 4, lines 103–106)

Seen as a whole, these cross-role accounts illustrate that implementation was not a unified process but a set of overlapping and sometimes mismatched experiences. Policy and advisory participants viewed the pilot as a structured initiative tied to legislative metrics. School-based participants experienced the work as intensive, relational, and coordinator-driven. Community partners perceived limited visibility and influence. Researchers encountered variation that complicated measurement and interpretation.

These tensions underscore why implementation and sustainability follow distinct logics. Implementation can leverage complexity, coordination, and concentrated resources even when actors across the system interpret the work differently. Sustaining the work requires more convergence: practices must become simple enough, meaningful enough, and internally owned enough to continue without formal reinforcement.

Adoption may depend on structured design and coordinated momentum. Endurance depends on whether practices traveled across classroom and school-based roles, were understood in shared ways, and became embedded in daily culture rather than anchored in temporary structures. In this sense, the disconnect across participant narratives during implementation helps explain why sustainability required different conditions than those that launched the work.

4.7.4. Participant Perspectives on Improved TIP Pilot Design

Participant reflections suggested that sustainability considerations should be incorporated into pilot design from the outset rather than treated as a downstream concern once implementation has occurred. Reflections across external roles indicate that the design logic of the TIP Pilot Study emphasized concentrated implementation supports without equivalent attention to post-funding continuity. There was a convergence on the idea that pilot architecture should be judged not only by what it launches, but also by what it leaves behind once supports are removed. Participants involved in policy design advisory and development described how the pilot emerged through state budget processes and political influence, explaining:

> There may there's a lot of different players. There's an organization, COSA. The Confederation of School Administrators, and they definitely, have political might. And when there's a pop going forward, they have, you know, have input as does the Oregon Education Association. (SPD, p. 2, lines 37–40)

They also noted that some policy decisions were shaped by stakeholder advocacy: "For the life of me I can't remember exactly what constituency forced the change in the language to do the pilot with high schools" (SPD, p. 2, lines 34–36).

An external research participant reflected on the evaluation process and the limitations of focusing primarily on implementation metrics:

> This little bit of meeting at the end was what recommendations do you have for sustainability? What kind of piece is there? But I don't know that they went as far as they could have for sure. Talking about how to keep this rolling and keep it engaged post pilot wasn't as much a part of that. (ER, p. 4, lines 93–98)

They further suggested that schools would have benefited from clearer guidance for continuing the work: "it would have been really helpful to have a playbook to take with you" (ER, p. 12, lines 322–333).

A community organization partner also raised questions about the relationship between policy design and local community needs reflecting: "People would decide what an activity was, what the program was, what they wanted to do without really thinking about what the community wanted to do" (CO-P, p. 8, lines 206–207). The same participant expanded on this concern:

> People in academia are people that have been educated making decisions on how this should be. And I think that was what really surprised me is that instead of looking to the community to find out what was needed, it can be hard to do that. (CO-P, p. 7, lines 195–198)

A community organization advisory participant similarly questioned whether the funding model used for the pilot was the most effective approach for system change:

> I'm not one to think everyone needs to be on this model or move forward in a particular way. But, in general, how can you have reflexive practice that really helps, say, what are we doing well and where are these problems that we can focus on through a trauma informed lens. (CO-A, pp. 6–7, lines 173–176)

School-based practitioners offered more practical perspectives on how sustainability might be supported within schools. One practitioner emphasized the value of internal expertise:

> They are the ones that go to the training, and they're the ones to delineate the information to your staff and give them support. I think there's a pathway for that. I certainly think that that's more valuable than not doing it at all. I think it's got to be the right person. (SB-P, p. 18, lines 504–506)

Leadership participants emphasized the deeper paradigm shift required to sustain trauma-informed approaches: "That's a paradigm shift that just takes time, but I wouldn't say that people were resistant to the idea. I think that it was just, it's a different way to think about students and behavior" (SB-L-1, p. 5, lines 126–128).

Taken collectively, participants' reflections imply several design principles for future pilots: plan for resource withdrawal and role sunset from the start; distribute expertise beyond a single coordinator; codify practices through policy, PLCs, and artifacts; provide a practical "playbook" of routines that can be enacted without funding; require community co-design and reciprocity; and include stage-appropriate measures of institutionalization, not only implementation fidelity.

Considered in combination, these reflections suggest that implementation and sustainability should be conceptualized as interdependent but distinct design challenges. Pilots that pair early implementation supports with explicit planning for resource withdrawal, distributed leadership, and routine embedding may produce different architectures than pilots designed primarily to maximize short-term uptake.

Evaluating success exclusively through implementation fidelity or immediate outcome shifts may obscure the longer-term question of which elements are built to endure. Pilot success

may therefore require redefinition. Rather than asking only whether a reform can be launched effectively, sustainability-focused design asks whether it can survive the absence of concentrated support.

4.7.5. Summary: Implementation and Sustainability as Distinct Phenomena

The distinction between implementation factors and sustainability factors emerged as a central analytic finding of this 6-year follow-up study. Across interviews, participants consistently differentiated between what supported early uptake of trauma-informed practices during the pilot period and what appeared to enable certain elements to endure once formal supports were withdrawn. This distinction was especially visible when juxtaposing school-based accounts of routine embedding with external and advisory perspectives emphasizing codification, policy anchoring, and system-level reinforcement.

Consistent with findings reported across Domain 1 through 7, participants described implementation as occurring under conditions of concentrated resources, structured coordination, and formal accountability. Implementation supports identified in the 2019 ODE Final Report, including dedicated coordinator roles, structured professional development, cohort-based learning cycles, and formal data collection were widely credited with generating early uptake, shared language and opportunities for experimentation. Participants affirmed that these supports were effective for launching trauma-informed work (ODE, 2019).

However, participants also emphasized that these same implementation supports did not reliability predict which practices continued after pilot-era scaffolding was withdrawn. Instead, sustainability was associated with a different set of conditions, including simplicity, low resource demands, alignment with educator values, peer diffusion, cultural reinforcement by administrators, and flexibility for adaptation. External and advisory participants further

suggested that institutionalization through policy mechanisms and professional learning communities could have been buffered against the erosive effects of staff turnover and shifting priorities.

Importantly, participants used this distinction to reflect critically on the original pilot design. Several suggested that while the pilot was well structured for implementation, it paid limited attention to how practices would function once funding, coordination, and formal accountability ended. Participants indicated that greater attention to embedding practices within everyday instructional routines, developing distributed internal expertise, and planning explicitly for leadership turnover might have strengthened long-term sustainability.

These reflections, when taken collectively, indicate that implementation and sustainability operate according to related but analytically distinct logics. Implementation asks whether a reform can be launched under supported conditions; sustainability asks whether it can remain viable amid constraint, turnover, and competing demands. Across Sections 4.2 through 4.7, participants did not describe sustainability as the preservation of pilot-era structures. Rather, enduring practices were those that became internalized within professional knowledge, embedded within daily instructional culture, adaptable to changing contexts, and feasible without continued external resources.

4.8. Domain 7: Divergent Perspectives: Where Participants Differed

While substantial convergence emerged across participants regarding patterns of sustainability, the analysis also revealed important areas of divergence. Attention to divergent perspectives is an intentional analytic strategy in this chapter. Differences in interpretation are not treated as inconsistencies to be resolved, but as evidence of how trauma-informed reform is experienced differently depending on role, institutional positioning, philosophical orientation,

and temporal vantage point. These divergences show how vantage point shapes judgments of effectiveness, scale, and legitimacy.

Participants differed in how they assessed pilot effectiveness, diffusion, design decisions, and long-term impact. These differences illuminate tensions between practitioner experience and research data, between political feasibility and evidence-based recommendations, and between Western trauma frameworks and community-grounded alternatives. School-based participants tended to emphasize enacted routines and cultural shifts; external researchers emphasized diffusion evidence and evaluation constraints; policy participants foregrounded legislative metrics and political tradeoffs; community partners emphasized structural conditions, reciprocity, and collective healing.

Participants also differed in their assessments of whether the pilot "worked," depending on whether success was defined by practice persistence, whole-school transformation, or student outcomes. Unreported graduation data, which came through participant reporting data, suggested positive impacts not captured by commonly cited metrics such as chronic absenteeism. From school vantage points, sustained routines and improved outcomes for specific student groups signaled success; from external vantage points, limited spread beyond cohorts and measurement constraints complicated causal claims.

Tensions also emerged between research evidence favoring elementary-level intervention and political realities that prioritized high school implementation. Indigenous and community-based perspectives challenged Western, individual-focused trauma frameworks, emphasizing systemic conditions and collective healing rather than individual resilience alone. These tensions underscore that sustainability judgments depend on what counts as "evidence," which outcomes are privileged, and whose voices shape design and evaluation.

Practitioner perceptions of widespread adoption sometimes conflicted with external evaluation findings showing limited diffusion beyond cohort participants, suggesting that sustainability may be highly context dependent. Participants also differed in views on whether dedicated coordinators should be permanent or function as temporary scaffolds. Finally, contrasting top-down versus teacher-led implementation models highlighted the influence of school culture and leadership on both adoption and sustainability.

4.8.1. Did the Pilot "Work"? Competing Assessments

Participants offered differing assessments of whether the pilot achieved its intended goals. These assessments depended heavily on how success was defined and from what vantage point evaluation occurred. School-based, research, policy, and community perspectives each applied different criteria and time horizons to judge impact.

School-based practitioners largely characterized the pilot as successful when success was defined by practice persistence and cultural shift. One instructional practitioner pointed to observable changes in school discipline data during the pilot period, noting: "When (our TIP Coordinator) was here, you could look at the bar graph. You know? And over a couple of years, you know, referral the number of referrals written went down a lot" (SB-P, p. 5, lines 124–125). This same instructional practitioner emphasized that many of the strategies introduced during the pilot continued to influence classroom practice: "I could tell you just, you know, qualitatively that a lot of the strategies kind of instilled in us and encouraged us to remain like we talked about" (SB-P, p. 17, lines 470–472).

Leadership participants similarly described enduring cultural shifts in how educators approached students:

> I would very strongly say that I think that the paradigm shift that happened for the staff is still in place there. The approach and the care by which staff approach students have shifted in a way that has been sustainable even with changes in both money streams and in leadership at the school. (SB-L-1, p. 7, lines 175–177)

The implementation participant also pointed to outcome data that suggested positive trends for specific student groups: "I am convinced that graduation rates went up, not because we did anything with these kids" (IC, p. 21, lines 560–561).

Participants involved in the pilot's design described how the work influenced their later professional practice. One policy design advisory participant explained:

> I used what we learned and what they continued to learn at those high schools in the work that I did. So, we, as a staff, we all did the ACEs. We learned about it. We learned about strength and resilience. It was something we worked on all year. And there were some, results that were coming out of those schools early on about which particular practices that teachers already knew how to do kind of scored, and it was like we had a quadrant model or something with practices that were, you know and there was one quadrant where they were particularly effective in terms of trauma informed practices. (SPD, p. 10, lines 266–273)

Other participants expressed greater uncertainty about the pilot's overall effectiveness. A community organization partner explained that their involvement with the project had been limited:

> I don't know what ended up with that. I know when we had conversations and they're like, well, how do we bring people to the school? How do we do these sorts of things? It was one thing that I always think about and I'm sure I thought then is, what's keeping

> from going to those meetings or going to the school and identifying what's going to bring people. (CO-P, p. 10, lines 276–279)

The community organization advisory participant also emphasized that trauma-informed work was already gaining momentum prior to the pilot:

> How things roll out and what they like, right now is a whole other thing that is important when we're taking a systems look at what's shifting and how things are going to shift, you know, without looking at the political environment. (CO-A, p. 13, lines 369–371)

These perspectives demonstrate that pilot success depends on metric selection, time horizon, and institutional position. For practitioners, sustained classroom practice signals success. For systems-level and research participants, attribution and diffusion metrics complicate evaluation.

4.8.2. Elementary vs. High School: The Road Not Taken

One systems-level participant described tension between research evidence favoring early intervention regarding trauma-informed practices coupled with the political realities that shaped pilot placement at the high school level. A pilot design and advisory participant described how the original evidence base emphasized earlier intervention: "All the research that we were looking at the time of the Chief Education Office showed that meaningful work addressing resiliency and having trauma informed practices really, for the most part, were at elementary school" (SPD, pp. 1–2, lines 29–32).

However, the final design of the pilot shifted toward high school implementation. The pilot design and advisory participant went on to explain: "I can't remember exactly what constituency forced the change in the language to do the pilot with high schools. There may have been a lot of different players…and they definitely have political might" (SPD, p. 2, lines 35–

38). The school-based instructional practitioner also echoed the view that earlier intervention may have been advantageous:

> Because elementary schools (are) where you work a lot of that stuff out. And I think that now we really know these kids are coming in with lower academic skills than we have seen. And when what comes with lower academic skills without lowering standards, because we don't want to do that, kids are feeling more overwhelmed. (SB-P, pp. 11–12, lines 321–324)

These reflections highlight the intersection of research evidence and political feasibility in policy design. Even when research strongly supports one model, policy implementation may follow a different path. This divergence underscores that sustainability and impact are shaped not only by implementation quality but also by political and institutional constraints. It also clarifies a cross-role disconnect, systems-level actors emphasized evidence and policy trade-offs, while school-based practitioners focused on developmental fit. Both vantage points shaped expectations for what the pilot could realistically achieve.

4.8.3. Western Framework vs. Indigenous Alternative

A community organization partner represented a perspective that diverged from the Western, individually focused trauma framework used during the pilot. Community participants described approaches grounded in culturally specific frameworks that predated the pilot initiative. One community organization advisory participant recalled how culturally grounded approaches were introduced to the pilot advisory group: "They came to talk about how trauma informed practice was integrated in their site to help the committee really understand what trauma informed practice looks like in a culturally specific organization that serves youth and also serves other ages" (CO-A, p. 3, lines 72–75).

A community organization partner described their own approach as rooted in strength-based and relational frameworks rather than deficit-oriented models:

> We really look at doing strength-based work instead of deficit-based work. And I think for some people, when we talk about that people are getting it now. Too often in the social work realm or in different educational systems people look at a problem that needs to be fixed, and then you fix that problem then you move on to the next problem. And so, what we do when we're looking for trauma-informed practices and being strength-based is not looking at the deficits. Instead, we look at the strengths of a person to create balance in their lives. I think what we brought to that table was really talking about our use of the relational worldview model in our practices, which is a way of holistically looking at somebody. (CO-P, p. 2, lines 41–49)

This perspective reframes trauma-informed practice through a collective and culturally grounded lens. The opposition in trends and findings are not simply methodological but philosophical. This community partner participant also questioned the framing of resilience itself: "It feels like a deficit model when we talk about resiliency, because I have seen a shift …on how we talk about our community as being resilient and less as we're, we don't talk about resiliency as much anymore" (CO-P, p. 16, lines 447–450).

Participants involved in pilot design reflected on similar tensions in how trauma language was used. One pilot design advisory participant noted:

> You can be exposed to the ACEs thing and your immediate reaction to it, and maybe even for the rest of your life, it might never be something that you would call trauma. And resiliency and the strength that you get from that might be happening in the moment. Anyway, I think the word's somewhat problematic. I think that there are these early life

> indicators that students are in need of strength-based practices and supports, but it's a spectrum. And if you asked 100 questions, we'd all get a score, you know, maybe from one to a 100, and it would be a little bit more evened out. I think we'd see that more people benefit from TIP than we would think originally. Even people with very few ACEs scores would benefit from those practices. So, I think that the number of scores is problematic, and the fact that they're called trauma is somewhat problematic too. (SPD, p. 7, lines 180–190)

These perspectives expand the analytic scope of trauma-informed reform beyond classroom strategies to systemic inequities, cultural frameworks, and differing philosophical orientations toward trauma and healing. They complicate any singular definition of trauma-informed practice. They also expose a cross-role disconnect community and Indigenous partners prioritized relational coherence, cultural specificity, and reciprocity, whereas school and policy actors often relied on Western evidence frames and branded models. This tension matters for sustainability design, because practices endure when they align with community frameworks as well as school routines.

4.8.4. Whole-School Spread: Practitioner Experience vs. Research Data

A clear divergence emerged between how school-based participants experienced whole-school spread and how external researchers measured it. While school-based practitioners frequently described trauma-informed practices as diffusing widely across their schools, research participants reported data that suggested a more concentrated pattern of uptake. School-based practitioners described this spread as broad and cumulative over time. One instructional practitioner recalled how early implementation efforts attempted to distribute specific tools across classrooms: "At the time, we definitely pushed, like, the Zones of Regulation charts. You

know, almost every teacher had those" (SB-P, p. 2, lines 51–52). The same practitioner described the expectation that adoption would gradually expand through informal peer influence:

> You would hope that 5 would grow to 10 and grow to 15. And you know, and maybe that's as far as you get. But then, you know, that's 15 out of your 23 or whatever, and that's pretty good because then kids can come to expect some of those things and that's how you're building shifts. (SB-P, p. 16, lines 462–465)

Leadership participants similarly described a shift toward teacher-led diffusion as the work progressed: "I think we started off with leadership pushing out a lot of the training, and then as we moved forward, we had more capacity for teachers to be able to lead that work" (SB-L-1, p. 4, lines 88–89).

In comparison, an external research participant reported that network analysis data suggested a more limited pattern of diffusion beyond cohort participants: "The cohort strengthened its ties to the project" (ER, p. 3, line 56). But the same researcher followed up findings with: "It was hard to say that it had an impact on the broader school" (ER, p. 4, line 111).

These opposing interpretations, taken together, suggest that diffusion may be highly context dependent, and that practitioner experience of spread may not align neatly with network-based measurement tools. While practitioners described trauma-informed practices as woven into school culture, research data portrayed a more bounded network centered on cohort participants, underscoring that diffusion is contingent on both measurement approach and role vantage point.

4.8.5. Coordinator Essential vs. Coordinator as Temporary Scaffold

Participants also differed in whether dedicated coordinator roles should be considered essential or temporary. This distinction reflected role-based understandings of what it takes to

launch trauma-informed practice versus what it takes to sustain it. School-based practitioners frequently emphasized the importance of having a dedicated individual responsible for guiding the work during the early stages of implementation. One practitioner explained: “I think without a dedicated person there to kind of help guide and support you, especially with those initial steps to get you to the point where, look, we’re starting to see, you know, a decrease in referrals” (SB-P, p. 5, lines 121–123). The implementation participant similarly highlighted the value of the coordinator structure during the pilot: “The way they set it up with a coordinator with $200,000 was super helpful” (IC, p. 16, lines 412–413).

At the same time, some practitioners suggested that a permanent coordinator role might not be necessary once foundational knowledge had been established. A community organization advisory participant emphasized the importance of leadership practices that support ongoing reflection among educators:

> The focus is on practice. And I think that in many ways, the role of the principal is on coaching individual teachers. What are you learning? What are you trying? And spreading that influence, you know, creating communities that are useful to teachers as they’re thinking about how I mean, teaching is so hard to do, and so understanding and having vulnerability and support for teachers, you know, I think is a really important and tough job. (CO-A, p. 11, lines 300–305)

These accounts reveal competing theories of change: some participants viewed the coordinator as indispensable for building initial momentum and coherence, while others saw the coordinator as a time-limited scaffold meant to give way to distributed leadership. This tension illustrates how sustainability depends on whether expertise is centralized in a single role or gradually absorbed into routine practice and shared responsibility.

4.8.6. Top-Down vs. Teacher-Led Implementation

A further divergence concerned how trauma-informed practices were introduced and led across the two pilot sites, revealing contrasting theories of organizational change. Participants described one school as primarily teacher-led, while the other relied more heavily on administrative direction. A school-based instructional practitioner described how trauma-informed strategies were framed within classroom practice, "it's not a directive. You know? It's not saying you must give your kids breaks" (SB-P, p.4, lines 95–96).

Accounts differed depending on participants' system position, with systems perspectives noting differences in how leadership structures shaped implementation dynamics across the two pilot sites. An external research participant summarized the divergence succinctly: "[This high school] … teacher led, the teachers got more isolated during that time" (ER, p. 7, line 190). The same participant described the alternative approach observed at the comparison school:

> (The other high school) approach of having administrators a lot more connected to this work might have ended up serving them better because they could say, say, you know, from a leadership perspective, as you're reaching out to students be sure you do x and be sure you do y. More guidance from that form. (ER, p. 7, line 192–195).

A school-based implementation participant similarly described how early expectations were initially introduced through formal channels but ultimately gained momentum through teacher engagement: "Some people weren't really sure why it happened, but it was the district that said, hey, we're going to do this pilot. And then in terms it because a little top-down from the state and partners" (IC, p. 6, lines 157–159).

Community participants also reflected on how approaches to change influence educator receptivity. One community organization advisory participant cautioned that overly standardized

approaches can generate resistance: “My feeling is that unifying it so that everyone does the same thing at the same time, is going to cause resistance” (CO-A, p. 11, lines 305–306).

A community organization partner emphasized the importance of humility and openness when introducing change within established institutions:

> I really do think that you have to come at it with any of this kind of work with a certain amount of humility, understanding that we may have a lot of skills. We may have had a lot of education, and we still don’t know how to work with everybody. And how do we scaffold things to meet people’s needs? (CO-P, p. 14, lines 385–389)

The same participant noted that long-standing habits within institutions can complicate reform efforts: “Just because we’ve done something a certain way doesn’t mean that’s the way we need to keep on doing it, and it’s okay to change” (CO-P, p. 13, lines 380–381).

These accounts illustrate that implementation trajectories were profoundly shaped by leadership philosophy and school culture. Whether practices were introduced through administrative direction or teacher-led momentum influenced not only initial engagement but also the form of sustainability that followed, highlighting that the organizational pathway to change is itself a determinant of long-term endurance.

4.8.7. Summary: Value of Divergent Perspectives

Divergent perspectives in this study were not discrepancies to be resolved but data in their own right. They made visible how role, power, culture, and institutional position shape what counts as evidence, how success is defined, and which practices are likely to endure. Contrasting approaches across the two pilot schools showed that both administrative and teacher-led models can function under particular conditions, while teacher-led diffusion tended to deepen peer credibility and everyday enactment.

As a collective discourse, the interviews surfaced several core tensions. Practitioner accounts that emphasized widespread cultural uptake did not always align with research data indicating limited diffusion beyond cohorts. Evidence favoring earlier intervention at the elementary level conflicted with political realities that placed the pilot in high school contexts. Community and Indigenous perspectives challenged Western, individually focused trauma frameworks by foregrounding systemic conditions, reciprocity, and collective healing. Views on coordinator diverged between those who saw them as essential infrastructure and those who viewed them as temporary scaffolds intended to give way to distributed leadership.

These divergences underscore that implementation and sustainability are negotiated in environments characterized by competing values, constrained resources, and multiple legitimate vantage points. Rather than converging on a single interpretation, the study demonstrates that endurance is a function of context and institutional ownership. The analytic value of these differences is that they reveal why launch conditions and long-term continuation require distinct designs and why measurement must be sensitive to local enactment, role-based experience, and community frameworks.

4.9. Chapter Summary

Six years after formal pilot conclusion, trauma-informed practice neither disappeared nor persisted in its original form. It selectively endured and evolved, with practices that were simple, relational and identity-aligned persisting, while resource-intensive structures requiring coordination and funding diminished.

The COVID-19 pandemic operated as a naturalistic durability test. Relationship-centered and conceptually grounded practices transferred across modalities and settings when institutional capacity was strained. Practices dependent on formal coordination and shared physical formats

proved more fragile. Rising student needs intensified reliance on adaptable, low-resource strategies, even as system-level transformation remained constrained by competing demands and limited capacity.

Taken as a whole, the interview data revealed that participants interpreted effectiveness and sustainability through different lenses. For practitioners, the persistence of routines and shifts in school culture signaled success. For researchers, diffusion evidence and attribution limits complicated claims of whole-school change. For policy and advisory participants, codification through policy, professional learning communities, and artifacts appeared necessary to buffer the effects of turnover. For community and Indigenous partners, alignment with cultural frameworks and reciprocity was essential to legitimacy and continuation. These differences demonstrate that durability is not simply a matter of fidelity; it is a function of context, constraint, cultural fit, and institutional ownership.

Taken together, the findings indicate that implementation and sustainability follow distinct logics. Initial adoption benefited from concentrated coordination, structured training, and formal accountability. Long-term endurance depended on simplicity, peer diffusion, administrative cultural reinforcement, flexibility for contextual adaptation, value alignment, and, in some cases, codification that outlives specific roles. Sustainability emerged less through preservation of the pilot's original architecture and more through internalization into professional judgment, embedding into daily instructional culture, and adaptation to shifting conditions without ongoing external support.

By examining trauma-informed reform after scaffolding disappeared and during collective disruption, this study extends understanding beyond early implementation phases and reframes sustainability as adaptive endurance rather than static continuation. Chapter 5 interprets

these results through the lenses of implementation science and trauma-informed educational change, translating the patterns identified here into design principles, measurement implications, and policy recommendations for building initiatives that are launched effectively and built to last.

CHAPTER V

5. DISCUSSION

This study investigated the long-term sustainability of trauma-informed practices in two Oregon high schools that participated in the state's 2016 to 2019 Trauma-Informed Practices Pilot Study. Through qualitative interviews with eight participants representing distinct institutional roles this research examined which practices sustained, which disappeared, which evolved, and what conditions enabled continuation 6 years beyond pilot conclusion and through the disruption of the COVID-19 pandemic.

The findings presented in Chapter 4 reveal a complex portrait of sustainability that resists binary classification. The data do not indicate wholesale abandonment, nor do they demonstrate comprehensive preservation of pilot-era structures. Instead, they reveal patterned selectivity, with "patterned" referring to recurring, non-random regularities in which practices were sustained, adapted, or discontinued across contexts and participant roles. Some practices endured with minimal structural protection. Others declined rapidly following the withdrawal of funding or coordination. Still others adapted in form while maintaining underlying foundational principles. Sustainability did not emerge as the natural endpoint of successful implementation. Instead, it operated according to a partially distinct set of enabling conditions shaped by resource contraction, leadership transition, institutional memory, and external disruption.

Across reflections on both strategy and structure, participants described sustainability as something that had to be actively negotiated rather than a process that unfolded automatically. School-based accounts emphasized that continuation depended on what educators could carry forward independently within their existing responsibilities and routines. Systems-level reflections similarly highlighted that the elements most likely to endure were those that could

function within established structures without requiring new resources or permissions. External research perspectives reinforced this interpretation, noting that the evaluation approach used during the pilot did not fully anticipate which components were structurally positioned to persist over time or how endurance would differ from short-term implementation success.

These layered perspectives underscore that sustainability must be understood not as a linear phase following implementation, but as a dynamic process mediated by structural feasibility, professional identity alignment, and adaptive capacity. This chapter situates those findings within existing literature on implementation science, trauma-informed practice, and educational reform sustainability. It advances the analytic claim that implementation and sustainability, while related, operate according to distinct logics that are insufficiently differentiated in dominant reform models.

By grounding the interpretive evolution argument in participant testimony across differentiated roles, this chapter develops a contribution that extends beyond description of a single pilot initiative. It clarifies the mechanisms through which trauma-informed practices become embedded, diluted, reinterpreted, or discontinued under real-world conditions of fiscal limitation and policy instability. The urgency of this analysis is heightened by persistent behavioral health inequities within Oregon. As discussed in prior chapters, statewide data document elevated youth distress, rural service gaps, and structural fragmentation within crisis response systems.

Schools implementing trauma-informed practices therefore operate within a broader ecosystem characterized by workforce shortages, funding instability, and uneven service capacity. Trauma-informed frameworks function not merely as optional enhancements but as equity-relevant responses to sustained structural and psychological stressors. Understanding

durability beyond grant-funded implementation is critical to ensuring that reform efforts produce lasting benefit rather than temporary innovation.

This chapter proceeds in five parts. Section 5.1 describes the significance of the study. Section 5.2 summarizes key findings without collapsing participant divergence. Section 5.3 situates findings within existing literature and highlights theoretical extensions. Section 5.4 develops theoretical and conceptual contributions emerging from the data. Section 5.5 articulates practical implications. Section 5.6 advances recommendations aligned to institutional roles. Section 5.7 addresses limitations and future research. Taken together, these analyses recast sustainability not as the terminus of implementation but as adaptive endurance mediated by cultural embedding, peer networks, and contextual fit.

5.1. Significance of the Study

The significance of this study lay in its focus on the "what happened next" phase of trauma-informed practice implementation, a phase rarely examined in the existing literature. While numerous studies have explored the process of adopting trauma-informed practices in schools, far fewer have investigated what occurs after initial implementation resources conclude, how practices evolve in real world settings, or how educators reinterpret and apply trauma-informed principles during periods of systemic stress. By centering educator and partner perspectives across the post pilot and pandemic periods, the study contributes to a more complete understanding of how trauma-informed practices function over time.

This study is significant because it illuminates the sustainability and adaptability of trauma-informed approaches during one of the most disruptive educational periods in modern history. Oregon's diverse geographic and demographic contexts created a natural backdrop for understanding how trauma-informed practices were shaped by local conditions, resource

availability, workforce stability, and community needs. The findings offer insight into how trauma-informed practices shift from formal implementation structures to more informal, culturally embedded routines once external supports dissipated.

The study is also significant in its attention to the systemic factors that shape sustainability. By identifying the roles of leadership, policy, professional learning, community partnerships, and internal school culture, the research provides actionable evidence for school and district leaders seeking to maintain trauma-informed efforts beyond pilot timelines and in the face of competing initiatives. As schools across the country continue to grapple with escalating trauma exposure, student mental health concerns, disrupted attendance patterns, and the lingering consequences of the pandemic, a deeper understanding of how trauma-informed practices survive and evolve becomes increasingly critical.

Finally, the study contributes to the field of implementation science by distinguishing between the factors that support initial adoption and those that truly support sustainability. By highlighting the conditions under which trauma-informed practices persisted, changed, or disappeared, the research points toward more realistic, context responsive approaches for long-term implementation. This understanding holds meaningful implications for designing educational reforms that are resilient, culturally grounded, and capable of supporting students and educators through ongoing and future challenges.

5.2. Summary of Key Findings

Analysis of participant interviews clarifies several mechanisms through which trauma-informed practices either endured, disappeared, or adapted across the 6-year post-pilot period and through the disruption of the COVID-19 pandemic. These findings challenge binary interpretations of reform success by demonstrating patterned variation, with “patterned” referring

to recurring, non-random regularities. These findings further indicate selectivity shaped by structural dependency, cultural alignment, positional authority, and contextual constraint. Importantly, these sustainability trajectories diverged in meaningful ways from the factors that enabled initial implementation during the funded pilot years.

5.2.1. What Sustained: Usable, Identity-Aligned Practices

Practices that endured shared structural characteristics that appear to facilitate durability under conditions of resource constraint. They were simple, low cost, identity-aligned, embedded in daily routines, and adaptable to shifting conditions. These practices functioned as routine interactional structures embedded within daily instruction, including predictable openings, brief emotional check-ins, scheduled regulation breaks, relationship-centered instructional approaches, and shared brain-based language regarding stress and learning. These routines were also grounded in a shared interpretive framework that emphasized neurobiological understandings of stress and behavior. Participants described shifts in how student actions were interpreted, moving from compliance-based frameworks toward regulation and relationship centered perspectives. This shared way of thinking appeared to support the integration of practices into daily instruction by aligning them with educators' beliefs about teaching and learning.

Across interviews, school-based practitioners consistently characterized these routines as extensions of school culture rather than add-on initiatives. Predictable openings, check-ins, and regulation breaks were described as practices that had become woven into instructional repertoires rather than approaches requiring additional planning, external permission, or dedicated resources. Their endurance was attributed to their ease of use within the natural flow of classroom life and their congruence with educators' sense of who they were as practitioners.

From this vantage point, sustainability emerged when routines were felt to be part of one's teaching identity.

A systems-level participant interpreted the same phenomenon through a different lens, emphasizing structural feasibility rather than identity alignment. From that perspective, persistence was enabled by the fact that these routines did not require new funding streams, specialized positions, or additional instructional time, making them compatible with existing organizational structures.

Together, these interpretations point to two complementary mechanisms of sustainability: at the practitioner level, practices continued when they felt like authentic extensions of professional identity; at the system level, they endured when they could be maintained without new resources or formal infrastructure.

An external researcher added an evaluative dimension, noting that the practices most visible 6 years later were "the smallest units of action," not the comprehensive structures emphasized during the pilot. These durable routines resemble what Embry and Biglan (2008) describe as behavioral "kernels," simple, evidence-informed practices that can function independently without complex program infrastructure. This observation reinforces the analytic claim that durability was associated with practice usability rather than with formal infrastructure.

Across both internal and external organizational perspectives, participants consistently described these routines as legible as "good teaching" rather than additional programs layered on top of instructional demands. Their durability reflected usability within real classroom constraints rather than formal protection through policy or funding. They did not require specialized equipment, ongoing external expertise, or protected time beyond what teachers could reasonably sustain.

Table 5.1 revisits the state-level structural conditions outlined in Chapter 2 and summarizes how each domain functioned in practice across the 6-year post-pilot period based on participant accounts from the TIP study.

Table 5.1

State-Level Structural Conditions and Observed TIP Study Sustainability Outcomes

Structural Domain	Audit Finding (Oregon Secretary of State, 2025)	Relevance to Trauma-Informed Educational Sustainability	TIP Study Findings (Observed Sustainability Patterns)
Crisis Infrastructure	Partial implementation of Crisis Now framework; limited funding for stabilization centers	Schools cannot rely on consistent community stabilization pathways	Schools compensated through internal relational and regulation practices; lack of external stabilization constrained referral continuity and increased reliance on school-based supports
Funding Stability	Dedicated funding for 988 hotline; unstable funding for stabilization services	Sustainability requires funding streams beyond pilot periods	Grant-dependent structures (coordinators, cohorts, formal PD) dissolved post-pilot; low-cost, routine practices were more durable
Rural Disparities	Higher suicide rates and staffing shortages in rural areas	Rural schools face disproportionate sustainability barriers	Limited access to community partners intensified reliance on universal, school-embedded practices
Youth Behavioral Health	Elevated youth distress and limited crisis staffing	Schools operate amid elevated and persistent student need	Heightened need reinforced relevance of trauma-informed practices but outpaced system capacity for structural reform
Data Systems	Fragmented behavioral health data systems	Limits evaluation and cross-system coordination	Formal TIP data collection ended post-pilot; evaluative reasoning shifted to practitioner judgment and informal indicators
Workforce Capacity	Chronic staffing shortages and leadership turnover	Workforce instability weakens continuity	Sustainability depended on educator internalization and peer diffusion; vulnerable to staff turnover and leadership change

5.2.2. What Disappeared: Structural Dependency Without Structural Continuity

A different pattern emerged for practices requiring ongoing resources, specialized expertise, or formal coordination, which proved structurally vulnerable once pilot funding ended. Full-time coordinator roles were eliminated due to budget realities. Formal cohort structures and PDSA cycles ceased without designated facilitation. Comprehensive all-staff trainings gave way to abbreviated onboarding sessions. Systematic implementation data collection ended when external research partnerships concluded. Biometric tools such as pulse oximeters were abandoned.

The implementation coordinator reflected candidly that "once the funding ended, so did the position. There wasn't a plan for what absorbed that work." A school-based participant described the same phenomenon from a resource perspective, emphasizing that roles without designated budget lines could not be maintained, even when the underlying practices remained valued. An external researcher characterized this as an implementation dependency problem, noting that intensive structures designed to accelerate early adoption were "never built to function without concentrated support." This statement introduces a structural tension central to the dissertation: practices most emphasized during implementation were not necessarily designed for autonomous continuation.

Importantly, discontinuation of specific tools did not necessarily reflect abandonment of underlying principles. Teaching regulation strategies continued without biometric devices. Peer knowledge exchange persisted after formal PDSA cycles ended. An instructional practitioner explained, "you have to have seen what works and what doesn't to try-on and help guide people through" (SB-P, p. 5, lines 134–135). This distinction underscores that disappearance often reflected structural dependency rather than core principle rejection.

5.2.3. What Evolved: Adaptation Under Constraint

Several practices did not follow a binary trajectory of continuation or abandonment. Instead, they underwent adaptive modification as schools recalibrated their approaches under conditions of reduced external support. Professional learning, for example, shifted from structured, coordinator-led sessions to informal, peer-supported exchange. In place of formal cohort cycles, learning increasingly occurred through hallway conversations, short demonstrations during PLC meetings, and routine modeling embedded within existing structures. From a practitioner perspective, this pattern represented a more organic form of learning that aligned with everyday professional rhythms. From a systems-level perspective, however, the same shift was interpreted as a loss of coherence, as the absence of formal cycles reduced opportunities for documentation, shared accountability, and consistent tracking of practice.

Linguistic adaptation followed a similar pattern. Explicit trauma-informed terminology gave way in many contexts to language framed around brain science or good teaching, which was perceived as reducing resistance while preserving underlying strength of theoretical grounding. Yet community-based perspectives cautioned that such shifts, while pragmatic, risked obscuring the structural and historical dimensions of trauma. This divergence suggests that linguistic evolution can simultaneously facilitate broader diffusion and dilute the capacity to name systemic sources of harm. Together, these adaptive changes illustrate that evolution was not merely operational but also meaning-based framing, reflecting the balance educators struck between maintaining core principles and navigating shifting institutional, cultural, and political conditions.

Targeted interventions broadened into universal strategies applied across classrooms. Formats adapted to technological shifts, moving from wall charts to badges to digital check-in

tools. External expertise transitioned toward internal recognition of experienced staff capacity. These adaptations reflect contextual modification in response to resource constraints, cultural resistance, technological change, and evolving institutional priorities. They signal neither simple dilution nor simple preservation, they illustrate dynamic recalibration.

5.2.4. COVID-19 as an Unplanned Durability Test

The COVID-19 pandemic functioned as an unplanned durability test, revealing which trauma-informed practices had become sufficiently internalized to survive abrupt institutional disruption. Relationship-centered routines and shared foundational understanding of stress translated across remote and hybrid modalities, enabling educators to adapt emotional check-ins to digital platforms and reframe regulation strategies for virtual classrooms. Brain-based explanations of stress and coping also extended to educator wellbeing, allowing staff to draw upon pilot-era concepts to interpret both student disengagement and their own emotional responses during the crisis.

At the same time, participant reflections indicated that practices dependent on physical proximity, coordinated structures, or multi-day professional learning proved more vulnerable. Mechanisms tied to relational connection, attunement, and idea-level understanding remained intact, while structures requiring collective scheduling or in-person facilitation were less able to withstand disruption. In this way, the pandemic exposed the difference between practices that had been integrated into professional judgment and culture and those that relied on formal implementation architecture.

Participants described the pandemic period as revealing both the resilience of school-level trauma-informed practices and the constraints of broader system structures. While educators adapted routines to new modalities and drew upon established relational and

knowledge-based foundations, this local flexibility did not translate into system-level change. Community-based participants noted that the disruption created conditions that could have supported meaningful redesign, yet policy responses primarily aimed to restore pre-existing structures rather than reimagine them. As a result, the pandemic illuminated the strength of embedded relational practices and brain-based understanding within schools, while simultaneously highlighting the limits of school-level capacity in the absence of complementary policy action or structural reform.

5.2.5. Sustainability Is Not Implementation

Perhaps the most consequential finding is that factors enabling 6-year sustainability differed fundamentally from those enabling initial implementation. During the pilot, implementation depended on concentrated funding, coordinator roles, formal structures, comprehensive training, and structured accountability. Participants consistently described these supports as accelerators of early adoption during the pilot phase.

Sustainability, however, depended on different mechanisms. Practice simplicity, peer influence, administrative cultural reinforcement without dedicated coordination, multi-year timelines, alignment with educator values, and flexibility for adaptation emerged as more determinative of endurance.

External research and advisory perspectives emphasized that early evaluation efforts focused primarily on fidelity, network patterns, and shifts in educator attitudes, rather than on identifying which elements were structurally positioned to persist in the long term. Systems-level reflections similarly suggested that had sustainment been treated as an explicit design goal rather than a presumed outcome of successful implementation, different decisions about roles, structures, and expectations might have been made. These insights challenge the common

stage-based assumption that implementation naturally progresses toward sustainability. Instead, participant accounts demonstrate that adoption and continuation operated according to related but distinct logics, with the latter shaped as much by feasibility, cultural alignment, and adaptive capacity as by the strategies that drove early uptake.

Reform endurance depended less on maintaining formal infrastructure and more on the fit between small, usable practice kernels (Embry & Biglan, 2008) and educator professional identity. These variables were supported by peer diffusion and light codification within existing systems. This study therefore contributes not only descriptive findings about what lasted but analytic clarification about why durability followed a different structural logic than implementation.

5.3. Situating Findings Within Existing Literature

The findings of this study extend and refine existing research in three interrelated domains: implementation science, trauma-informed practice literature, and educational reform sustainability. Rather than simply aligning with existing frameworks, the data generated here clarify mechanisms that have been theorized but rarely empirically differentiated over extended time horizons. In particular, this study distinguishes adoption drivers from sustainment drivers, specifies how adaptation functions in durability, and identifies structural tensions embedded within common pilot design models.

5.3.1. Implementation Science and the Sustainability Paradox

This study contributes to implementation science by demonstrating that sustainability operates according to a logic distinct from implementation rather than as its automatic endpoint. Stage-based frameworks such as Fixsen et al. (2005) describe implementation as progressing through exploration, installation, initial implementation, full implementation, innovation, and

sustainability. These models imply developmental continuity across stages. However, findings from this 6-year follow-up reveal discontinuity rather than linear progression. Practices that achieved structured implementation did not necessarily endure. Sustainability emerged not as the final stage of implementation but as a qualitatively different phenomenon shaped by resource withdrawal, leadership transition, and contextual constraint.

These findings align more closely with sustainability-focused frameworks such as Stirman et al. (2012), which emphasize adaptation, contextual fit, and continued organizational support. Yet this study extends that literature by identifying what may be termed an Implementation Paradox. Practices that required intensive support during implementation, including coordinator positions, comprehensive professional development, formal cohort cycles, and structured PDSA inquiry processes, proved least likely to persist once concentrated supports ended.

This paradox reveals a structural tension. Intensive scaffolding accelerates uptake but may simultaneously create dependency. Practices that were more modest in scope and less resource-intensive at launch often demonstrated greater durability precisely because they did not rely on specialized roles or external funding streams.

The findings also refine the Exploration, Preparation, Implementation, Sustainment (EPIS) framework (Aarons et al., 2011). While EPIS distinguishes inner and outer contextual influences across stages (Aarons et al., 2011), this study indicates that the salience of contextual factors shifts between implementation and sustainment. During implementation, outer context supports such as pilot funding, state-level coordination, and formal evaluation structures were central. During sustainment, inner context dynamics such as peer diffusion networks,

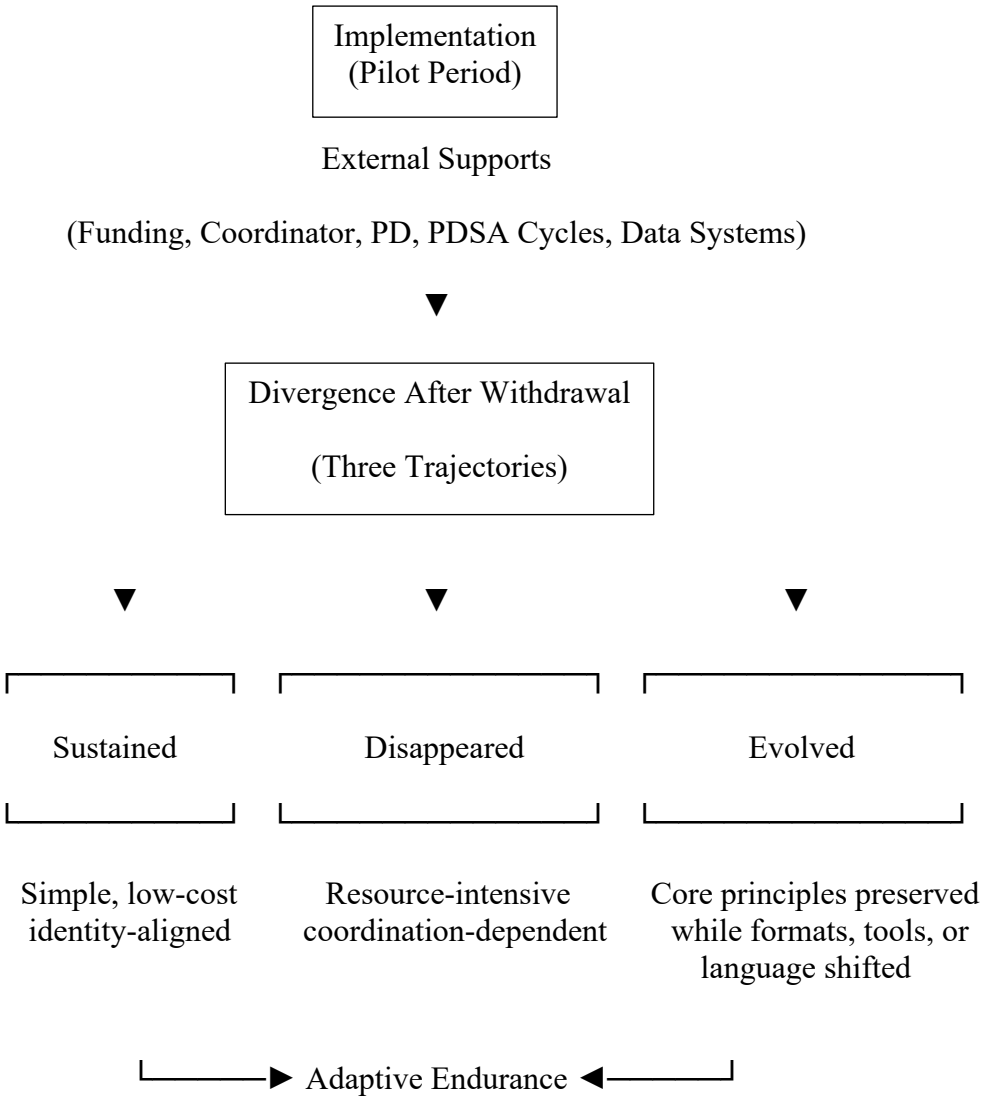
administrative cultural messaging, identity alignment, and flexible adaptation became more determinative.

This study therefore advances implementation science in three ways. First, it empirically differentiates adoption and sustainment drivers within a longitudinal qualitative design (Figure 5.1 below). Second, it identifies resource intensity as inversely related to durability under real-world constraints. Third, it reconceptualizes sustainability as adaptive endurance rather than passive continuation.

The contrasts between implementation and sustainability identified in this study are best understood together. The model below (Figure 5.1) integrates these findings, mapping trajectories after external support withdrawal, and the subsequent table (Table 5.2) contrasts the drivers that enabled adoption with those that enabled long-term endurance.

Figure 5.1

Conceptual Model of TIP Trajectories Following Pilot Withdrawal



Note. Implementation-to-sustainability transition model for trauma-informed practices. The figure depicts three post-pilot trajectories which were sustainment, disappearance, and evolution, and highlights the mechanisms shaping each pathway once external supports were removed.

Table 5.2 contrasts factors that supported adoption during the pilot with those that shaped long-term durability 6 years later.

Table 5.2

Comparison of Implementation vs Sustainability Drivers

Dimension	Implementation Drivers (Pilot Years)	Sustainability Drivers (6 years Later)
Resources	Large, concentrated funding	Minimal new resources; routine embedding
Roles	Dedicated coordinators; external experts	Distributed leadership; peer networks
Structures	Formal cohorts, PDSA cycles, structured PD	Informal modeling; hallway coaching; brief PLC demos
Language	Explicit "trauma-informed" framing	Brain science, "good teaching," relational framing
Time and Scheduling	Protected time; multi-day sessions	Fits into daily classroom rhythms
Data and Evaluation	Formal instruments; structured metrics	Embedded judgment; light documentation
Mechanism of Influence	Top-down directives; structured training	Peer diffusion; cultural reinforcement
Vulnerability	Dependent on funding and coordination	Dependent on leadership continuity
Resilience	Strong during pilot	Strong under constraint when aligned with identity and routine

Taken together, these contrasts reinforce the central finding that practices launched through intensive structures were not necessarily those most likely to endure, while simple, identity-aligned routines diffused and persisted under constraint.

5.3.2. Trauma-Informed Practice Literature and Conceptual Evolution

Findings regarding the evolution of trauma-informed language and framing engage directly with ongoing debates within trauma-informed practice research. Chapter 4 documented that while core concepts related to stress physiology, relational attunement, and regulation persisted across both schools, the explicit use of trauma-informed terminology shifted over time. Participants described a gradual shift from explicit trauma-informed terminology toward framing grounded in brain science, pedagogy, or everyday instructional practice. This evolution was neither uniform nor uncontested.

Some scholars argue that explicitly naming trauma is essential for confronting systemic harm and avoiding deficit-based interpretations of student behavior (Bath, 2008; Craig, 2016). The community-based organization participant in this study articulated concern that shifting language toward "good teaching" may reflect broader societal discomfort with naming structural trauma and inequity. From this vantage point, softening terminology risks obscuring root causes of harm and diluting institutional accountability. Trauma-informed practice, in this view, is not merely a set of strategies but a political and ethical stance that requires explicit acknowledgment of systemic stressors.

At the same time, literature on educator resistance to trauma-informed practice notes that explicit trauma framing can provoke concerns about therapeutic overreach, lowered expectations, or pathologizing students (Berger & Martin, 2020; Brunzell et al., 2016). School-based practitioners in this study described how reframing practices through brain science or everyday pedagogy reduced defensiveness while preserving core principles, a sensemaking process through which educators aligned trauma-informed practices with professional identity and norms

(Weick, 1995). Participants emphasized that alignment with educator identity and professional norms increased uptake and longevity.

Rather than positioning these perspectives as mutually exclusive, the present study provides empirical evidence for what may be understood as strategic reinvention. Drawing on Rogers (2003), reinvention describes the process by which adopters modify innovations to improve contextual fit without abandoning central components. In this case, participants preserved foundational trauma-informed concepts, including recognition of stress response, relational safety, and direct instruction in regulation strategies, while adapting terminology to align with institutional culture and teacher self-concept.

The data suggests that language adaptation functioned as a sustainability mechanism rather than as idea-level retreat. However, the accounts also reveal ongoing tension. When trauma-informed principles become normalized as "good teaching," the explicit structural critique embedded in trauma discourse can become less visible. Sustainability achieved through reframing may therefore risk attenuating the reform's equity orientation if structural analysis is not intentionally maintained. Participants' divergent interpretations make this unresolved tension visible rather than resolving it.

The study also contributes to debates regarding targeted versus universal trauma-informed approaches. Several participants described an evolution from targeted interventions for students identified as trauma-impacted toward universal classroom strategies applied to all students. This shift aligns with public health models advocating universal precautions in trauma-responsive systems (SAMHSA, 2014). Universal framing reduces stigma, minimizes diagnostic gatekeeping, and acknowledges the widespread prevalence of trauma exposure.

Participants' accounts suggest that universalization supported both equity goals and practical durability. When practices were framed as applicable to all students, they became less vulnerable to accusations of special treatment or lowered standards. School-based practitioners described greater ease of implementation when strategies were embedded into standard instructional routines rather than positioned as exceptional interventions. At the same time, systems-level participants cautioned that universalization must not obscure the disproportionate impact of trauma on historically marginalized communities.

Thus, this study extends trauma-informed literature in two substantive ways. First, it identifies strategic reinvention as an empirically grounded mechanism through which language adaptation can support sustainability while preserving interpretive substance. Second, it demonstrates that universal framing may enhance durability and reduce stigma, yet it introduces a parallel risk of diminishing explicit structural critique. By documenting how these tensions are navigated differently across settings and stakeholder groups, the study advances a more nuanced understanding of how trauma-informed practice evolves over time within real educational systems.

5.3.3. Educational Reform Sustainability and the Role of Complexity

Findings regarding practice simplicity and the disappearance of complex structures contribute to the broader educational reform literature on why innovations fail to endure. Chapter 4 documented that brief emotional check-ins, predictable relational openings, shared stress-response language, and regulation breaks remained present across 6 years, while formal cohort cycles, structured Plan-Do-Study-Act (PDSA) inquiry protocols, coordinator roles, and systematic data collection dissolved following the withdrawal of concentrated support.

Tyack and Cuban's (1995) concept of the "grammar of schooling" highlights that conflict with entrenched institutional time structures, organizational routines, and interactional norms are likely to be resisted or absorbed without substantial change. This study supports that framework while specifying the mechanisms through which compatibility operates. Participants consistently emphasized that practices which endured did not require additional staffing, protected professional learning time, specialized equipment, or reconfiguration of instructional schedules. Because these practices could be enacted within standard bell schedules, typical class periods, and routine instructional planning, they were assimilable into the existing grammar of schooling rather than requiring its disruption.

School-based practitioners described relational openings and regulation breaks as "part of how I teach now," rather than as separate programming layered onto instruction. A contrasting dynamic appeared when systems-level participants reflected that formal structures such as cohort-based PDSA cycles required designated facilitation, protected time, and coordination across school contexts and organizational positions. When those scaffolds disappeared, the structures themselves proved fragile. This differentiation clarifies that compatibility was not merely ideological but structural. Practices endured when they fit the temporal, organizational, and staffing realities of secondary schooling.

At first glance, the durability of brief routines might appear to represent what Elmore (1996) characterizes as "shallow change," operating at the level of visible practice rather than deep structural transformation. However, those working inside schools and those supporting them externally described gradual shifts in how educators interpreted student behavior, stress response, and relational responsibility. Teachers reported moving from viewing dysregulation primarily as defiance to understanding it as a physiological stress response. School-based

practitioners described increased attention to relational safety within disciplinary conversations. These shifts suggest that small, repeated practices may function as entry points for deeper cognitive and cultural change.

The disappearance of formal PDSA cycles and systematic data protocols further illustrates tensions between improvement science and classroom reality. Bryk et al. (2015) emphasize disciplined inquiry, structured testing cycles, and formal networked improvement communities. During the pilot period, these structures were present and described as helpful for focused learning. However, once coordinator roles and structured facilitation ended, these formal inquiry cycles ceased.

Importantly, participants did not describe the disappearance of formal PDSA cycles as equivalent to the disappearance of inquiry. Teachers continued to observe student response, test adjustments, and share strategies through informal peer exchange. A school-based practitioner described hallway conversations and brief PLC discussions as spaces where iterative adjustment continued without formal documentation. An external researcher acknowledged that while formalized data systems ended, educators retained practical knowledge of what was working in their classrooms. Participants described a shift in disciplined inquiry from codified structures to embedded professional judgment. This divergence demonstrates that improvement methodologies designed for research-intensive or grant-supported contexts may require simplification to remain viable in resource-constrained environments. Structured improvement science may accelerate learning during initial implementation, yet its formal mechanisms may not be sustainable absent ongoing coordination and funding. Organic professional learning may operate through less formalized but more durable mechanisms, particularly when embedded in peer relationships and everyday routines.

The findings therefore extend existing literature on sustainability in educational reform by distinguishing between structural complexity and explanatory depth. This distinction builds on educational reform scholarship that examines how initiatives persist, institutionalize, or fade after initial implementation, particularly work emphasizing sensemaking, routinization, and institutional alignment rather than continued formal program infrastructure (Coburn, 2001; Spillane et al., 2002; Tyack & Cuban, 1995).

Structural complexity refers to the degree of coordination, staffing, documentation, and formal architecture required to maintain a practice. Explanatory depth refers to the extent to which practices reshape underlying beliefs, interpretations, and norms. In this study, structurally simple practices carried significant meaning-oriented implications. Brief relational openings and regulation instruction altered educator sensemaking about behavior and responsibility over time.

Durable reform, therefore, may not require elaborate structures once framework-level shifts have occurred. Instead, it may require simple, usable practice kernels that are compatible with daily work yet capable of gradually reshaping professional cognition and school culture. At the same time, participants' reflections caution that simplicity alone does not guarantee equity transformation. Without intentional system-level reinforcement, deeper structural inequities may remain intact even as classroom routines evolve.

By documenting both endurance and disappearance and taken as a whole, over time, this study advances sustainability scholarship beyond binary models of success or failure. It demonstrates that endurance is patterned rather than uniform, that complexity is inversely related to durability under constraint, and that small practices can carry transformative potential when embedded within the grammar of schooling, defined here as the taken-for-granted routines, structures, and interactional norms that organize daily school life.

5.4. Contributions Emerging from the Data

5.4.1. COVID-19 as a Natural Stress Test of Sustainability

The COVID-19 pandemic functioned in this study as a natural stress test of trauma-informed durability. Chapter 4 documented that practices grounded in relational attunement and shared meaning-oriented understanding transferred more readily across remote and hybrid modalities than practices dependent on coordinated structures, formal facilitation, or physical tools. This distinction was not merely theoretical. It emerged consistently across participant roles.

School-based practitioners described how emotional check-ins, predictable relational openings, and shared stress-response language were immediately portable into virtual classrooms. Digital check-in forms replaced in-person circles. Regulation strategies were reframed for remote contexts. Teachers reported that they did not need to reestablish the legitimacy of relational practice during crisis. The analytic groundwork had already been laid.

A different pattern emerged between systems-level participants and external researchers, who noted that practices requiring cross-role coordination, protected time, or formal facilitation proved more fragile under pandemic conditions. Multi-day professional learning sessions, structured cohort cycles, and coordinated data collection protocols stalled as attention shifted toward emergency response. The body of interviews illustrated what could move with individual educators and what required institutional architecture.

Emerging research documents increased adolescent anxiety, depression, absenteeism, and learning disruption following the pandemic (Golberstein et al., 2020; Kuhfeld et al., 2020). However, less attention has been given to how pre-pandemic school culture shaped response

capacity. This study contributes to that gap by examining how prior trauma-informed investment influenced adaptive response during systemic disruption.

Participants consistently described that shared language around stress response, regulation, and belonging enabled quicker collective sensemaking. A school-based practitioner explained that educators already understood dysregulation as a stress reaction rather than as defiance, which reduced debate about whether relational approaches were necessary. A school-based practitioner noted that conversations about student well-being did not feel new or controversial during remote learning. Instead, staff moved directly to adaptation.

This aligns with organizational learning theory suggesting that shared mental models increase adaptive capacity under stress (Senge, 1990). However, this study extends that literature by specifying the conditions under which shared knowledge translated into sustained practice. Portable routines and orientation framing proved durable. Formalized systems and coordination structures did not transfer as readily. Educator knowledge, skill, and confidence enabled adaptation most effectively when practices could be enacted without reliance on formal coordination, documentation, or system-level infrastructure. The distinction clarifies that endurance is not evenly distributed across reform components, but varies according to structural dependency, defined here as the degree to which a practice requires formal systems, specialized roles, or ongoing external support to function.

Importantly, participants also articulated limits. While classroom-level practices and relational norms endured, broader structural transformation did not follow. The community-based participant characterized the pandemic as a missed opportunity to confront deeper systemic inequities. From this vantage point, trauma-informed principles were leveraged to stabilize classrooms but were not translated into durable policy redesign. Systems-level

participants similarly acknowledged that disciplinary frameworks, accountability pressures, and funding structures largely reverted to pre-pandemic norms.

This tension between adaptive classroom capacity and system-level inertia is analytically significant. It suggests that trauma-informed sustainability operates more readily at the micro and meso levels than at the macro policy level. Classroom routines and shared practice-logic framing transferred under stress. Systemic redesign did not.

The findings therefore extend sustainability literature by separating adaptive endurance from structural transformation. Pandemic resilience at the classroom level did not automatically produce policy-level reconfiguration. Sustainability must be examined at scale. What endures in daily practice may not shift institutional architecture. This differentiation clarifies both the promise and the limits of trauma-informed reform durability under systemic crisis.

5.4.2. Peer Influence and Organic Spread in Educational Innovation

One of the most consistent sustainability drivers identified in Chapter 4 was peer diffusion. Across school-based practitioners and systems-level participants, interview data consistently emphasized the importance of informal hallway conversations, classroom modeling, and brief demonstrations that replaced structured cohort cycles once formal coordination ended. These interactions were not centrally organized. They occurred through proximity, trust, and shared instructional context.

School-based practitioners described observing colleagues implement emotional check-ins or regulation breaks and then experimenting with similar approaches in their own classrooms. School-based practitioners noted that teacher-led modeling often carried more influence than formal directives. External participants reflected that while the pilot intentionally designed

structured cohorts to catalyze diffusion, long-term continuation appeared to depend more on organic peer-to-peer exchange than on formalized dissemination plans.

This finding aligns with sensemaking and implementation scholarship emphasizing the social mediation of instructional reform. Prior research demonstrates that educators are more likely to adopt and sustain practices when they are modeled and legitimized by trusted peers rather than formally designated experts (Coburn, 2001). Consistent with distributed cognition perspectives on policy implementation (Spillane et al., 2002), participants in this study described trauma-informed practices as taking hold through shared language, situated experimentation, and peer credibility rather than through policy directives alone. In line with research on social networks and instructional change (Daly & Finnigan, 2010), practices spread primarily through informal professional ties rather than through formal dissemination mechanisms. The data extend this literature by showing how such network-based diffusion becomes especially consequential for sustainability once formal implementation infrastructure dissolves.

First, while structured cohort models were intentionally designed to promote diffusion beyond initial implementation teams, the data in Chapter 4 indicate that formalized sharing mechanisms did not consistently produce whole-school spread. Social network analysis from the original pilot documented limited diffusion beyond cohort participants, even as practitioners perceived broader adoption of trauma-informed practices. This divergence between perception and network-level data is analytically significant. Practitioners frequently described trauma-informed ideas as “everywhere” or “embedded”, while empirical network data suggested continued clustering within trained groups. The coexistence of these perspectives complicates conventional assumptions about how innovation spreads and how diffusion should be assessed, highlighting that the felt presence of a reform may not correspond to its structural circulation.

Second, although organic peer diffusion proved more durable than coordinator-led dissemination, under conditions of reduced funding and formal support, it introduced a parallel vulnerability. Participants consistently noted that when knowledgeable staff members left the building, expertise exited with them. School-based practitioners described losing informal leaders whose modeling and relational influence had sustained momentum. Systems-level participants characterized turnover as a persistent destabilizing force that repeatedly disrupted continuity. While distributed expertise enhanced durability under constrained conditions by reducing reliance on formal coordination, it lacked mechanisms for preservation once personnel changed.

These patterns reveal a sustainability trade-off. Peer-driven diffusion reduces dependence on external scaffolding and formal implementation roles, increasing viability when resources contract. However, diffusion that remains embedded primarily in individuals, rather than lightly anchored within organizational systems, remains fragile under conditions of attrition.

The findings therefore extend social learning and diffusion theory by identifying hybridization as a condition of sustainability. Informal peer exchange supports daily practice continuation, sensemaking, and cultural embedding, while lightweight codification such as onboarding artifacts, shared language tools, documentation and deliberate induction structures anchors practice beyond individual carriers. This hybrid configuration preserves the adaptative strength of peer-mediated diffusion while mitigating turnover related loss. Importantly, this conclusion is not abstract. It emerges directly from the tension documented in chapter 4 between peer-driven sustainability and turnover-induced fragility. Sustainability depends not only on whether ideas spread, but on how they are anchored when people move.

5.5. Implications

5.5.1. Theoretical Implications

This study does not simply confirm existing implementation science frameworks. It clarifies a distinction those frameworks often imply but rarely empirically separate. Implementation and sustainability operate according to different logics. Chapter 4 demonstrated that structures enabling adoption did not reliably predict continuation. Coordinator roles, formal cohort cycles, structured improvement processes, and concentrated training accelerated implementation but did not guarantee endurance. What endured were practices that were simple, identity-aligned, relational, and adaptable under constraint. This empirical differentiation, grounded in 6-year retrospective accounts across multiple institutional roles, provides temporal depth rarely captured in short-term pilot evaluations. Sustainability did not emerge as the final stage of successful implementation. It emerged as adaptation under withdrawal.

This study advances three interrelated theoretical contributions to the literature on implementation and sustainability. First, the Implementation Paradox highlights that intensive launch supports, including coordinators, structured inquiry cycles, and comprehensive training accelerate adoption but may simultaneously create dependencies that undermine long-term sustainability once scaffolding is withdrawn. Participants consistently distinguished between conditions that enabled initial implementation and those that supported continued use, indicating that the presence of structured supports did not translate directly into endurance. Rather than ensuring continuation, these supports may concentrate expertise and ownership in ways that are difficult to sustain under typical organizational conditions. As a result, practices introduced with the greatest initial investment may be more vulnerable to decline when those supports recede. This finding suggests that implementation success and sustainability are shaped by different

conditions, rather than representing sequential stages of the same process. These dynamics suggest that conditions shaping initial implementation also influence how practices are interpreted, adapted and sustained over time within organizational contexts.

Second, the concept of Flexible Fidelity captures how core trauma-informed principles persisted while delivery formats, tools, and language adapted to contextual constraints. This finding suggests that sustainability is strengthened when fidelity is anchored in principle rather than procedure.

Third, the Cultural Fragility Paradox demonstrates that while trauma-informed practices endured most robustly when culturally embedded, that same embedding was vulnerable to leadership turnover and staff attrition in the absence of light structural reinforcement. This paradox was not explicitly named by participants but emerged as an analytic interpretation of patterns across accounts describing both the strength of cultural embedding and its vulnerability during leadership transition.

In this study, lightly codified structures refer to minimal, low-burden mechanisms that preserve core practices without reintroducing the complexity of formal implementation systems. Participants described elements of these practices, while the framing of lightly codified structures reflects an analytic synthesis of those patterns. Examples include brief shared routines such as consistent classroom entry check-ins, common language around regulation and belonging, and relational practices embedded in daily instruction. Structural reinforcement may also take the form of simple onboarding supports for new staff, including concise orientation materials, peer modeling, and informal mentorship that communicate core principles without requiring extensive formal training. At the organizational level, light codification may include maintaining shared artifacts such as brief practice guides, visual reminders, or integration of

trauma-informed principles into existing meeting structures rather than separate initiatives. These forms of reinforcement allow practices to remain visible and transmissible across staff turnover while preserving the flexibility that supports long-term sustainability.

Together, these insights contribute a nuanced theoretical account of why sustainability requires different conditions than implementation and how conditions shaping initial implementation influence how practices are taken up, adapted, and sustained within organizational contexts.

5.5.1.1. Reconceptualizing the Implementation-to-Sustainability Continuum

Sustainability should be conceptualized as qualitatively distinct from implementation, requiring differentiation of drivers across implementation and sustainability stages. Evaluation should incorporate sustainability potential, not only adoption metrics, and recognize multi-year timelines extending beyond typical pilot cycles.

Six years after pilot conclusion, the participating schools did not demonstrate stable continuation of pilot-era structures, instead, they exhibited selective durability shaped by resource withdrawal, leadership shifts, and contextual stressors including the COVID-19 pandemic. Sustainability emerged not as completion but as adaptation.

These findings challenge linear models of implementation that position sustainability as the natural endpoint of successful adoption. Instead, sustainability represents a distinct phenomenon requiring different supports and operating through different mechanisms than implementation. This reconceptualization carries several theoretical implications.

First, it suggests the need for dual-focus frameworks that explicitly differentiate implementation science drivers from sustainability drivers. During implementation, external expertise, intensive training, formal structures, and organizational mandates were central to

overcoming resistance and building capacity. During sustainability, practice simplicity, peer influence, cultural embedding, administrative reinforcement without dedicated coordination, and flexibility for adaptation became more determinative. Frameworks such as EPIS may benefit from not only distinguishing stages but articulating distinct mechanisms that shift in salience across time.

Second, implementation strategies should be evaluated not only for their capacity to achieve adoption but for whether they cultivate conditions that enable continuation. What may be termed the Implementation Paradox, identified in Section 5.3.1, indicates that intensive scaffolding may accelerate uptake while simultaneously generating dependency that undermines durability once scaffolding is removed. Implementation success and sustainability potential may therefore conflict. This suggests the need for sustainability-informed implementation: approaches that prioritize internal capacity-building, peer learning networks, embedding within existing routines, and adaptable protocols even when such approaches produce slower visible adoption.

Third, the temporal dimension of sustainability requires expansion. Several participants described practices that required 4, 5, or 6 years to solidify, exceeding the 3-year pilot period. Full sustainability assessment therefore demands longitudinal horizons extending well beyond traditional grant cycles. Moreover, practices did not remain static, they evolved in format, framing, and delivery while preserving core principles. Sustainability is better conceptualized as ongoing adaptive endurance rather than stable preservation. This aligns with complexity theory perspectives recognizing that durable systems adapt under changing conditions rather than achieve equilibrium (Byrne & Callaghan, 2013).

This reconceptualization reframes sustainability as dynamic rather than terminal, patterned rather than uniform or idiosyncratic, and contingent rather than automatic. Importantly,

these findings do not suggest that reduced support or minimal implementation is sufficient for sustainability. Rather, they indicate that the design of implementation supports must be intentionally oriented toward transition. Intensive early scaffolding appears necessary to build shared understanding, reduce resistance, and establish initial practice; however, sustainability depends on whether these supports cultivate internal capacity, shared ownership, and adaptability rather than ongoing reliance on external structures. In this sense, the challenge is not the presence of support, but whether support is designed to fade into practice rather than remain as a permanent condition for continuation. Participant accounts further suggest that pre-existing relational practices, educator beliefs, and organizational conditions may shape the ease with which trauma-informed approaches are sustained; however, the data indicate that even in the absence of these conditions, sustainability can emerge when implementation supports are successfully internalized and embedded within everyday practice. In this sense, sustainability was shaped both by what schools brought to the work and by how implementation supports were designed to transition responsibility from external scaffolding to internal practice.

5.5.1.2. Toward a Theory of "Flexible Fidelity"

Findings support what may be termed Flexible Fidelity: preservation of core principles such as relational check-ins, regulation instruction, and stress-response literacy alongside contextual adaptation of format, tools, schedules, and language. In this study, adaptation did not signal erosion of practice integrity; rather, it frequently enabled durability under shifting resource conditions. In many cases, it supported durability when resources shifted.

Implementation science has long wrestled with tensions between fidelity and adaptation. Traditional perspectives emphasize strict adherence to evidence-based models to preserve active

ingredients (Durlak & DuPre, 2008). More recent sustainability research acknowledges that adaptation may be necessary for contextual fit and long-term viability (Chambers et al., 2013).

This study's findings complicate binary fidelity-adaptation framing. Practices that endured demonstrated continuity of principle alongside flexibility of form. Zones of Regulation moved from wall charts to badges to Google Forms, yet emotional state awareness remained central. Regulation instruction persisted after pulse oximeters disappeared, preserving concept while abandoning tool. Collaborative inquiry continued after formal PDSA cycles ended, maintaining peer learning while shedding prescribed protocols.

These examples suggest that sustainability depends on distinguishing core components from adaptable implementation peripheries. Blase and Fixsen (2013) differentiate essential practice elements from modifiable implementation features. This study extends that distinction by arguing that identification of core versus peripheral elements must explicitly incorporate sustainability implications. Core principles must remain viable under fluctuating resource conditions. Peripheral features may require flexibility to survive.

However, Chapter 4 also revealed tension. The community-based participant cautioned that reframing trauma-informed practice as "good teaching" risks obscuring structural trauma and systemic inequity. Flexible Fidelity therefore carries ethical implications. When language shifts to increase acceptance, certain critiques may become less visible. Adaptation that enhances sustainability may simultaneously reduce explicit attention to structural harm.

The theoretical implication is not abandonment of fidelity but differentiation of fidelity targets. Fidelity to relational and regulatory principles may coexist with adaptation of terminology, format, and delivery mechanisms. Recognizing this distinction reduces false dichotomies between purity and pragmatism.

Finally, findings regarding universal framing contribute to equity debates. Practices framed as universal rather than targeted proved more sustainable and less vulnerable to stigma within school contexts. Universal application reduced perceptions of special treatment and aligned with educator values of fairness. If targeted framing introduces sustainability barriers while universal framing enhances both equity and durability, then universal design may constitute a core sustainability component even if not originally theorized as such.

Flexible Fidelity therefore represents not compromise but calibrated adaptation anchored in principle and attentive to equity visibility.

5.5.1.3. Cultural Integration as Sustainability Mechanism

A third theoretical implication concerns how innovations become embedded within organizational culture and how that embedding functions as a mechanism of durability. Chapter 4 findings demonstrated that in the absence of coordinator roles and formalized implementation structures, administrative cultural messaging and peer norms frequently substituted for structural scaffolds. School-based practitioners described trauma-informed principles persisting where they became embedded in how educators defined "good teaching," how leaders interpreted student behavior, and how teams understood stress and dysregulation. School-based practitioners reinforced relational language in staff meetings and evaluation conversations. Systems-level participants observed that schools where leaders consistently modeled predictable openings and regulation-informed responses exhibited stronger continuity after formal supports ended.

Institutional theory suggests that practices endure when they become taken-for-granted elements of organizational identity rather than externally imposed initiatives. Findings from this study provide longitudinal empirical support for that proposition. Cultural embedding reduced reliance on formal mandates, dedicated roles, and external expertise. When trauma-informed

concepts became normalized within professional discourse, daily routines sustained the work even after funding ended.

However, cultural integration also revealed fragility. Across multiple levels of the implementation system, participants described vulnerability to leadership turnover and staff attrition. In schools where administrators who had actively reinforced trauma-informed framing left, practices weakened. Experienced teacher leaders who informally modeled relational routines carried disproportionate influence. When they exited, continuity was disrupted. Cultural embedding provided resource-light sustainability but remained dependent on ongoing reinforcement through relational and symbolic leadership.

This dynamic reveals what may be termed the Cultural Fragility Paradox. Cultural integration enables sustainability under constrained conditions by reducing dependence on formal infrastructure. Yet it remains vulnerable to leadership disruption in ways that policy codification or structural integration might not. Cultural embedding alone may be insufficient to buffer against administrative turnover or rapid staffing change.

The theoretical contribution is twofold. First, this study identifies cultural integration as a primary sustainability mechanism in resource-constrained educational environments. Trauma-informed practices did not primarily endure through structural permanence. They endured through identity alignment, norm formation, and routinized interpretation of student behavior. Second, the findings demonstrate that cultural mechanisms require redundancy. Lightweight policy codification, onboarding documentation, and embedded routines within existing structures such as PLCs or MTSS processes may be necessary to stabilize culture across personnel transitions.

At the same time, cultural embedding may obscure origins. Participants described how trauma-informed principles became indistinguishable from "good teaching." While this normalization supported endurance and reduced resistance, it also carried potential dilution. The community-based participant cautioned that when explicit trauma language fades, structural critique may become less visible. Equity commitments embedded in trauma discourse may recede as principles become taken-for-granted.

The evolution from explicit trauma-informed framing to "good teaching" framing therefore represents a complex case of institutionalization. On one hand, reframing supported alignment with educator identity and reduced implementation resistance, strengthening sustainability. On the other hand, assimilation into existing pedagogical discourse risks obscuring the systemic and structural analysis that originally animated trauma-informed reform.

Recognizing this duality deepens theoretical understanding of institutionalization processes in educational reform. Cultural integration is neither purely protective nor inherently dilutive. It is a mechanism requiring active attention to what remains visible, what becomes normalized, and what may be lost through assimilation.

5.5.2. Practical Implications

Findings from this study offer implications for school and district leaders seeking to implement and sustain trauma-informed practices under real-world conditions. These implications are grounded in participant accounts across institutional roles and reflect tensions identified in Chapter 4 rather than prescriptive ideals detached from practices.

5.5.2.1. 5.4.1 Implications for Educational Leaders

Findings from this study suggest several actionable implications for school and district leaders implementing or sustaining trauma-informed practices:

Design for Sustainability from the Start. Participants' retrospective reflections indicate that sustainability cannot be treated as a post-implementation concern. Leaders who focus exclusively on comprehensive adoption during funded periods risk creating dependency on structures that cannot endure.

Designing for sustainability requires deliberate selection of simple, low-cost practices that can be maintained with existing personnel and time allocations. It involves embedding routines within existing instructional structures rather than layering parallel programs on top of teacher workload. It requires building internal adaptive capacity rather than relying on external facilitation.

A guiding question emerging from participant reflections is: if all external support disappeared tomorrow, which practices would continue? Sustainability-informed leadership requires asking this question at the outset rather than at the end of a grant cycle.

Invest in Cultural Embedding, Not Just Training. While comprehensive professional development supported initial adoption, sustainability depended more on cultural reinforcement than on one-time training events. Administrators who consistently modeled relational openings, reinforced shared language around stress and regulation, and publicly recognized teacher exemplars contributed to norm formation that outlasted formal structures. Leadership continuity emerged as a critical variable. Participants described how consistent administrative messaging over multiple years strengthened cultural embedding. Conversely, leadership turnover disrupted reinforcement patterns and weakened practice visibility. Thus, leaders must view trauma-informed reform not solely as a training initiative but as an ongoing cultural project requiring symbolic and relational reinforcement over time.

These findings raise important considerations regarding leadership readiness and preparation. Participants' accounts suggest that the ability to culturally embed trauma-informed practices depends not only on access to training, but on leaders' capacity to model relational approaches, sustain consistent messaging, and reinforce shared norms over time. This raises the possibility that districts may benefit from assessing and developing leadership readiness prior to large-scale implementation efforts. Rather than limiting access, such findings suggest the importance of preparatory supports, including professional learning, coaching, and mentorship, to build leaders' capacity to sustain trauma-informed work. This pattern reflects what this study identifies as the Cultural Fragility Paradox: practices that become more deeply embedded in school culture are also most vulnerable to disruption when leadership continuity is lost or when reinforcement structures are not sustained.

Leverage Peer Influence and Diffusion Strategically. Peer influence proved more durable than administrative mandates in sustaining daily practice. Informal demonstrations, hallway coaching, and brief PLC exchanges often carried disproportionate impact. Participants repeatedly described 5-minute modeling moments as more influential than large, vendor-dependent sessions.

Leaders can intentionally create opportunities for short, practice-proximal sharing among staff. Shared planning time, mentorship pairings, classroom observation, and visible recognition of peer expertise support diffusion without heavy structural overhead.

However, the findings also highlight network fragility. When knowledgeable teachers left, expertise exited with them. Leaders therefore must balance distributed leadership with light codification. Lightweight documentation of core routines, onboarding artifacts for new staff, and modest role supports such as stipend teacher specialists may buffer against turnover without

recreating unsustainable formal infrastructure. Sustainability requires both diffusion and preservation.

Reframe Resistance Through Strategic Language. Participants described how reframing trauma-informed practice through brain science or everyday pedagogy reduced resistance while maintaining guiding rationale and substance. Explicit trauma framing sometimes provoked concerns about therapeutic overreach or lowered expectations. Strategic language adaptation allowed practices to continue under contested conditions.

Leaders facing resistance may therefore emphasize stress-response research, relationship-building, and learning science connections while preserving trauma-informed foundations. This approach requires careful balance. Pragmatic communication should not erase equity commitments or structural awareness. Strategic reinvention must remain anchored in core principles.

Plan for Multi-Year Timelines. Participants emphasized that meaningful culture change exceeded typical pilot timelines. Several described practices that solidified only after 4 to 6 years. Leaders should communicate realistic timelines for culture embedding, resist premature judgments about reform success or failure, and begin sustainability planning during implementation rather than at its conclusion. Sustainability is not a static endpoint. It is gradual normalization shaped by time, reinforcement, and adaptation.

Expecting trauma-informed practices to be fully embedded within typical pilot or grant funding periods, often 2–3 years, sets unrealistic expectations. Leaders should communicate that meaningful culture change requires 4–6 years or more to solidify, build patience for gradual rather than immediate transformation, and resist premature conclusions about practice

effectiveness based on short-term observations. This also recognizes that sustainability planning should begin during implementation rather than after external support ends.

Balance Fidelity and Flexibility. Findings in Chapter 4 indicate that rigid adherence to specific protocols was not a predictor of long-term endurance. Practices that sustained demonstrated preservation of core principles alongside adaptation of implementation format. Leaders should therefore distinguish between non-negotiable theory-driven foundations and adaptable delivery features.

Core principles include recognition of trauma's impact on learning, commitment to relational trust, and explicit instruction in regulation strategies. These elements reflect the construct-level substance of trauma-informed practice. Implementation features such as specific tools, schedules, visual artifacts, digital platforms, or meeting formats proved more flexible across time.

Participants repeatedly described adaptation not as erosion but as a condition of viability. Teachers adjusted check-in formats to fit shortened class periods. Regulation instruction continued after biometric tools were abandoned. Professional learning shifted from structured PDSA cycles to informal peer exchange without abandoning inquiry. These adaptations preserved principle while modifying form.

Leaders who demand fidelity to every procedural detail risk undermining sustainability by constraining contextual adaptation. Conversely, unbounded flexibility risks dilution. The findings suggest that sustainability is strengthened when leaders explicitly name core principles and provide permission for contextual adaptation of format.

Policy and funding structures can reinforce this distinction. Rather than privileging fidelity checklists tied to attendance at training sessions or completion of protocols, leaders

might design expectations that emphasize documentation of core trauma-informed routines within existing PLC artifacts, advisory structures, or MTSS Tier 1 processes. Small, sustained investments such as stipends for teacher leaders, modest support for kernel codification, and inquiry cycles that examine usability and fit rather than only short-term attendance metrics may better align with sustainability conditions identified in this study. This approach reflects sustainability-informed implementation rather than compliance-oriented reform models. At a systems level, these findings suggest potential value in integrating trauma-informed sustainability, cultural embedding, and principle-based implementation into leadership preparation and administrative licensure frameworks, given the central role of leadership in sustaining these practices over time.

5.5.2.2. Implications for District and State Policymakers

Findings carry implications beyond individual schools and extend to district and state policymaking.

Rethink Pilot Funding Models. Traditional pilot models concentrate intensive resources during implementation and then withdraw support abruptly at the end of the funding period. Findings from Chapter 4 suggest that such models may inadvertently create dependency on structures that cannot endure. The Implementation Paradox identified in this study illustrates that intensive scaffolding accelerates adoption but may undermine continuation if no transition planning occurs.

Policymakers might consider tapering support models that gradually reduce external assistance while deliberately building internal capacity. Rather than funding full-time coordinator positions that disappear when grants end, distributed resource models could support

modest ongoing structures such as part-time coaching, teacher leadership stipends, embedded PLC facilitation, or lightweight documentation systems.

Alternatively, pilot designs might incorporate sustainability planning as a design constraint from the outset. Funding could privilege practices and supports that are viable within existing staffing structures and schedules. Evaluation criteria could therefore include sustainability potential alongside implementation fidelity. Such design shifts acknowledge that continuation is not automatic and must be architected deliberately. This reframing shifts pilot funding from a short-term innovation laboratory model toward a durability-oriented systems design approach.

Support Peer Learning Infrastructure. Findings regarding peer diffusion indicate that informal social networks and relational trust were more durable drivers of continuation than formal training mandates or one-time professional development. State and district investment in peer learning infrastructure may therefore yield greater long-term sustainability than repeated large-scale professional development sessions.

Such infrastructure includes cross-school learning networks, communities of practice, teacher leadership pathways, structured collaboration time, and cross-site modeling opportunities. These structures support ongoing collective learning rather than episodic knowledge transmission events.

This represents a shift in how professional development is institutionalized. Rather than treating professional development primarily as content delivery, policymakers might conceptualize it as capacity-building for sustained collective inquiry. Chapter 4 accounts suggest that when teachers learn with and from one another through routine, low-overhead interaction,

trauma-informed principles are more likely to endure under resource constraints and personnel turnover.

At the same time, peer infrastructure must be supported with minimal codification to buffer against attrition. Without light documentation and onboarding artifacts, diffusion remains person-dependent and vulnerable. Policymakers must balance investment in relational infrastructure with modest structural reinforcement.

Integrate Trauma-Informed Approaches into Existing Initiatives. Chapter 4 findings indicate that practices endured when braided into existing institutional structures rather than positioned as parallel initiatives. When trauma-informed approaches were framed as add-ons, they competed with other reforms for time, attention, and legitimacy. When embedded within existing systems such as teacher evaluation conversations, school improvement plans, discipline procedures, curriculum frameworks, social-emotional learning standards, PLC routines, MTSS Tier 1 processes, and advisory structures, they became structurally normalized.

Participants described this integration as protective for long-term continuation. Once predictable openings, relational check-ins, and regulation language were embedded within routine planning documents and team discussions, they were less vulnerable to funding shifts and initiative fatigue. They no longer required separate defense or justification.

This pattern reinforces a central analytic finding of this study: sustainability strengthens when trauma-informed principles become inseparable from ordinary educational operations. Embedding within existing structures does not necessarily dilute the framework. It alters its institutional location. Rather than operating as a named program, it functions as a lens shaping routine decision-making.

For policymakers, this implies that sustainability depends less on launching distinct trauma-informed initiatives and more on revising existing policy architecture to incorporate trauma-informed expectations. Integration reduces initiative fatigue while increasing durability.

Develop Policy Supports That Outlast Pilots. Although schools in this study sustained many practices through cultural embedding, participants repeatedly noted vulnerability to leadership turnover and staff attrition. Cultural reinforcement without policy anchoring proved durable under stable leadership but fragile under transition. This finding indicates that sustainability cannot rely exclusively on informal norm formation. State and district policies that require trauma-informed considerations within discipline procedures, attendance interventions, crisis response protocols, and school improvement planning may provide structural continuity beyond individual champions.

At the same time, Chapter 4 data cautions against prescriptive mandates tied to specific tools or formats. The durability observed in this study depended on adaptation and contextual fit. Policy therefore should articulate expectations at the level of principle rather than procedural detail. Requiring relational approaches to discipline, regulation instruction within Tier 1 supports, or documented belonging routines can preserve principle-driven fidelity while allowing contextual flexibility. Policy durability and adaptive viability must therefore coexist.

Fund Longitudinal Evaluation. This study's 6-year time horizon revealed that sustainability trajectories diverged from implementation trajectories. Several practices required 4 to 6 years to solidify beyond the pilot period. Others appeared strong during structured implementation yet dissipated after funding withdrawal.

Typical evaluation cycles conclude when pilot funding ends or shortly thereafter. Chapter 4 findings demonstrate that such timelines capture implementation success but obscure

sustainability dynamics. Policymakers who rely exclusively on short-term evaluation risk misclassifying both durable and fragile reforms.

Funding longitudinal research that follows sites 5 to 10 years post-implementation would provide critical insight into evolution processes, adaptation mechanisms, leadership effects, and long-term student outcomes. It would also allow empirical testing of the Implementation Paradox identified in this study. Without extended evaluation, policy decisions regarding scale-up rest on incomplete evidence.

Address Educator Wellbeing Systematically. Participants described how trauma-informed concepts expanded during the pandemic to include educator wellbeing alongside student support. Shared language about stress response, regulation, and belonging was applied not only to students but also to adults navigating crisis conditions.

This expansion was not peripheral to the reform effort. It functioned as a sustainability mechanism. When educators experienced relational and regulatory support within their own professional contexts, they were better positioned to sustain trauma-informed practices in classrooms.

Policies addressing educator workload, access to mental health support, psychological safety, and organizational stress are therefore not tangential to trauma-informed reform. They are structurally connected to its viability. Sustainability of student-focused trauma-informed practice depends on adult capacity within the educational system. This finding extends trauma-informed discourse beyond student intervention toward systemic adult support.

5.5.2.3. Implications for Professional Development Providers

For organizations and individuals providing trauma-informed professional development:

Teach Core Concepts, Not Just Specific Tools. Chapter 4 demonstrated that tools disappeared while principles endured over time. Pulse oximeters were abandoned. Teaching regulation continued. Formal PDSA cycles ended. Collaborative inquiry persisted in informal formats.

Professional development that prioritizes tool mastery without foundational grounding risks fragility. When external trainers depart and funding ends, tool-dependent implementation erodes. The pattern differed when educators understand how trauma affects learning, how stress influences cognition, and why relational attunement supports regulation, they retain adaptive capacity.

Professional development should therefore emphasize interpretive depth, theoretical rationale, and practical translation rather than rigid protocol replication. Building internal meaning-oriented coherence increases likelihood of endurance under constraint.

Build Internal Capacity for Peer Learning. Participants consistently identified peer diffusion as more durable than expert-driven dissemination models. When external experts exited, internal relationships sustained practice exchange. Professional development models that position trainers as primary knowledge holders may inadvertently inhibit long-term diffusion. Instead, providers should deliberately cultivate teacher leadership, peer facilitation skills, and structures for ongoing collegial inquiry.

This includes training teacher facilitators, developing peer observation protocols, organizing communities of practice that persist beyond formal contracts, and embedding short, role-specific demonstrations within routine meetings. On-site, peer-modeled micro-learning sessions proved more durable than multi-day off-site events that required substantial coordination.

Measurement practices should reflect the sustainability logic identified in this study. Light audit trails tracking the presence of practice kernels across teams, alongside belonging and classroom climate indicators aligned to daily routines, provide more relevant feedback than attendance counts at workshops. The goal is not replication of training events; it is cultivation of internal capacity for adaptive continuation.

Address Resistance Through Values Alignment. Findings in Chapter 4 demonstrated that resistance to trauma-informed implementation was not uniformly ideological but often framed through professional identity concerns. Participants described how language emphasizing brain science, relational pedagogy, and instructional effectiveness reduced defensiveness while preserving core substance. Professional development, therefore, should explicitly engage educator values rather than positioning trauma-informed practice as a competing philosophy.

This does not require abandoning trauma-informed terminology altogether. Rather, it requires sequencing. Leading with connections to good teaching, relationship-building, and student success establishes continuity with existing professional commitments. Trauma language may then be layered intentionally without triggering premature resistance. This approach aligns with the strategic reinvention processes discussed in Section 5.3.2 and reflects participant accounts of how reframing supported sustainability without framework-level retreat.

Acknowledge Resource Realities. Findings in Chapter 4 repeatedly underscored the fragility of practices dependent on concentrated funding, specialized roles, or protected time. Professional development that showcases resource-intensive models without addressing long-term feasibility risks creating implementation conditions that cannot be sustained.

Providers should transparently distinguish between high-resource pilot structures and low-resource practices that can endure beyond grant cycles. Participants noted that sustainability

planning was often absent during early implementation. Addressing fiscal and staffing constraints directly may temper initial enthusiasm, yet it strengthens long-term viability. Construct-level clarity regarding sustainability conditions ultimately supports both implementation integrity and ethical transparency.

Support Adaptation, Not Just Fidelity. Findings from this study suggest that rigid fidelity expectations may undermine long-term continuation. Professional development models emphasizing exact replication of pilot-era structures may inadvertently reproduce the Implementation Paradox identified in this study.

Training should instead distinguish core principles from adaptable features. Participants sustained regulation instruction, relational openings, and stress-response framing even as tools, schedules, and terminology shifted. Supporting thoughtful adaptation while maintaining knowledge-based fidelity reflects the Flexible Fidelity framework articulated in Section 5.5.1.2. This requires repositioning trainers not as guardians of protocol purity but as facilitators of contextualized application within local settings.

5.6. Recommendations

Building on findings, theoretical integration, and practical implications presented above, this section presents role-specific recommendations grounded directly in Chapter 4 data. These recommendations are not abstract prescriptions. They emerge from longitudinal participant accounts of what endured, what disappeared, and why.

5.6.1. Recommendations for Educational Leadership

5.6.1.1. Recommendations for School Leaders

School principals, assistant principals, and school-level leadership teams should consider the following actions:

Recommendation 1: Prioritize Simple, Universal Practices. Findings in Chapter 4 consistently demonstrate that durable practices were simple, low-cost, and embedded in daily routines. School leaders should therefore prioritize practices executable within existing instructional time, requiring minimal specialized equipment, and applicable universally across classrooms.

Examples identified by participants include predictable classroom openings, brief emotional check-ins, relational greetings, scheduled regulation breaks, and explicit instruction in stress-management strategies. These practices endured because they aligned with educator identity and were legible as good teaching rather than as additional initiatives layered onto instructional demands.

Recommendation 2: Embed Trauma-Informed Concepts in Leadership Communication. Sustainability in this study was strongly associated with cultural embedding rather than formal protection. Leaders who consistently referenced brain science, relational practice, and stress-response frameworks in meetings, evaluation conversations, and professional learning sessions reinforced trauma-informed principles as normative rather than exceptional. Embedding these concepts in staff bulletins, PLC agendas, mentoring conversations, and observation feedback supports normalization. When trauma-informed language becomes part of routine professional discourse, reliance on coordinator roles decreases and cultural continuity strengthens.

Recommendation 3: Create Structures for Peer Learning and Knowledge Sharing. Peer diffusion emerged as a primary driver of sustainability. Leaders should establish protected time for collaborative discussion of student needs, structured peer observation focused on relational practice, and teacher leadership roles that facilitate knowledge sharing. Participants

emphasized the effectiveness of short, practice-proximal demonstrations such as brief PLC shares, hallway modeling, and targeted walkthroughs. However, Chapter 4 also documented vulnerability to staff attrition. Leaders should therefore pair informal peer exchange with lightweight documentation systems to preserve institutional memory when experienced staff depart.

Recommendation 4: Frame Practices Strategically Based on Audience. Participants reported that framing trauma-informed practices through brain science and instructional effectiveness reduced resistance without compromising cognitive substance. Leaders should consider audience receptivity when introducing or sustaining initiatives. Emphasizing relational pedagogy, stress impacts on cognition, and student engagement may strengthen buy-in while maintaining fidelity to trauma-informed principles. Strategic framing does not require idea-level dilution. Rather, it reflects contextual responsiveness grounded in alignment with educator professional identity.

Recommendation 5: Plan for 4–6 Year Implementation Timelines. Chapter 4 findings demonstrated that cultural embedding required multi-year continuity. Leaders should communicate realistic expectations regarding implementation timelines and resist pressures for rapid transformation visibility within typical 2- or 3-year funding cycles.
Sustainability planning should begin during implementation rather than after external supports end. Protecting initiatives from annual displacement by competing reforms increases the likelihood of durable integration.

Recommendation 6: Develop Succession Plans for Leadership Continuity. Cultural embedding proved vulnerable to leadership turnover and staff transitions. Leaders should institutionalize trauma-informed commitments through school improvement plans, hiring

criteria, mentoring systems, and documented norms to mitigate disruption during administrative transitions. Without intentional succession planning, even well-integrated practices may weaken when leadership continuity shifts.

5.6.1.2. Recommendations for District Leaders

District superintendents, assistant superintendents, and district-level leadership teams should consider the following actions:

Recommendation 7: Integrate Trauma-Informed Approaches into Existing Initiatives. Rather than creating standalone trauma-informed programs that compete for attention and resources, district leaders should embed trauma-informed principles within existing district systems. Chapter 4 demonstrated that practices endured when they were inseparable from routine instructional and relational work rather than protected as special initiatives. District integration may include incorporating trauma-informed components into social-emotional learning curricula; requiring trauma-informed approaches within discipline and behavior intervention policies; including trauma-informed relational and regulation practices within teacher and administrator evaluation frameworks; aligning trauma-informed concepts with equity initiatives and culturally responsive teaching; and integrating trauma-informed perspectives into special education, English learner supports, and other student services.

Embedding trauma-informed principles within established systems reduces initiative fatigue and strengthens cultural normalization. It also mitigates vulnerability to funding cycles by making trauma-informed approaches structurally intertwined with routine district operations rather than dependent on temporary programs.

Recommendation 8: Fund Sustainable Supports Rather Than Intensive Pilots. Chapter 5 identified the Implementation Paradox. Practices supported by concentrated funding,

full-time coordinator roles, and intensive professional development structures accelerated adoption but did not predict long-term continuation once supports were withdrawn. District leaders should therefore redesign funding models to prioritize sustainment conditions rather than short-term visibility.

Instead of funding full-time coordinator positions at individual schools without long-term commitments, districts might invest in district-level coaching support shared across schools. Rather than concentrating resources in one-time comprehensive training events, districts should allocate funding toward ongoing professional learning communities, peer networks, and internal capacity-building structures. Small grants or protected time allocations targeted to kernel codification, peer diffusion structures, teacher leadership stipends, and lightweight documentation systems may produce more durable outcomes than large vendor-dependent initiatives. Multi-year funding commitments that taper gradually rather than end abruptly reduce structural shock and allow practices to embed before external supports recede. These recommendations emerge directly from participant accounts of how abrupt funding withdrawal destabilized formal structures while simpler, lower-cost practices endured.

Recommendation 9: Build Peer Learning Networks Across Schools. Peer diffusion functioned as a primary sustainability driver at the school level. However, Chapter 4 also revealed that diffusion was uneven and sometimes siloed within cohorts or buildings. District-level leadership is uniquely positioned to expand peer networks beyond single-site boundaries.

Districts should create structured opportunities for cross-school knowledge sharing, including regular network meetings where teachers and administrators exchange strategies, virtual platforms for ongoing resource exchange, facilitated cross-school classroom observation opportunities, teacher leadership roles spanning multiple schools, and documentation systems

that preserve effective practices for new staff onboarding. This recommendation reflects the hybrid diffusion model articulated in Section 5.4.2. Informal peer exchange enhances sustainability, but district-supported infrastructure mitigates vulnerability to staff turnover and localized silos.

Recommendation 10: Develop Policy Frameworks That Support Without Mandating. Chapter 4 findings suggest that rigid compliance models risk undermining contextual adaptation, while complete policy absence produces variability and inequity. District leaders should therefore develop enabling policy frameworks that require trauma-informed consideration without prescribing uniform methods. Policies may require trauma-informed reflection in discipline decision-making, mandate inclusion of relational and regulation supports within school improvement plans and require evidence of relationship-building and regulation instruction in instructional planning. However, districts should avoid mandating specific tools, scripts, or branded programs.

Accountability mechanisms should emphasize student-level outcomes such as attendance, behavior referrals, and indicators of belonging or classroom climate rather than process compliance alone. Instruments should remain brief, usable, and aligned with daily routines. Favoring short, in-house sessions led by practitioner exemplars over multi-day off-site events support contextual fit and sustainability. Pairing brief demonstrations with opportunities for immediate classroom try-outs and feedback reinforces usability. This balance reflects the Flexible Fidelity framework articulated in Section 5.5.1.2 and honors Chapter 4 evidence that adaptation supported endurance.

Recommendation 11: Address Educator Wellbeing as Integral to Trauma-Informed Systems. Chapter 4 findings demonstrated that trauma-informed principles extended beyond

student practice during the pandemic and were applied to educator wellbeing and organizational stress. This expansion was not incidental. Participants described educator capacity as a prerequisite for sustaining relational and regulation-based practices.

District leaders should therefore treat educator mental health and workload conditions as integral components to trauma-informed systems rather than adjacent concerns. This may include providing access to mental health resources for educators; addressing workload pressures that undermine relational practice; creating organizational conditions that support rather than deplete staff wellbeing; modeling trauma-informed supervision and communication; and recognizing educator wellbeing as directly connected to student support capacity. This recommendation reflects participant accounts indicating that sustainability is constrained when educator stress is unaddressed. It also extends trauma-informed frameworks to the adult system in which student care occurs.

Recommendation 12: Invest in Longitudinal Evaluation and Learning. Chapter 4 demonstrates that some practices required 4–6 years to solidify and that sustainability drivers differed from implementation drivers. Typical pilot evaluation timelines ending with grant cycles therefore miss critical information about durability.

District leaders should fund evaluation that extends beyond initial implementation, including research that follows implementation sites for 5–7 years post-pilot. They should ensure the collection of data documenting which practices sustain, evolve, or disappear, the examination of contextual factors associated with sustained implementation, and the assessment of long-term outcomes for students and school culture.

Longitudinal evaluation should not function solely as an accountability mechanism. It should inform iterative district learning and refinement. This recommendation directly

operationalizes the interpretive claim that sustainability constitutes a distinct analytic phase rather than a presumed endpoint.

5.6.2. Recommendations for Policy, Research, and Professional Development

5.6.2.1. Recommendations for State Policymakers and Education Agencies

State-level actors influence outer-context conditions that shape district and school sustainability capacity for sustainability. Chapter 4 findings, particularly when situated within implementation science frameworks in Section 5.3.1, indicate that outer-context resource stability and policy coherence significantly affect long-term continuation.

Recommendation 13: Establish Stable Funding Streams for Trauma-Informed Practice. Short-term pilot grants generate visibility but may undermine sustainability if funding ends abruptly. State policymakers should establish stable, ongoing funding streams dedicated to trauma-informed supports and student mental health infrastructure. This may include per-student allocations for trauma-informed supports; regional coaching networks providing sustained technical assistance across districts; statewide communities of practice connecting trauma-informed educators; and multi-year funding commitments that remain stable across budget cycles.

Stable funding does not necessarily require large funding allocations. Chapter 4 data suggest that modest, consistent supports may prove more durable than intensive short-term investments. Funding stability reduces the structural volatility that contributed to coordinator elimination and the collapse of formal structures in the sites studied.

Recommendation 14: Integrate Trauma-Informed Competencies into Educator Preparation and Licensure. Sustainability improves when trauma-informed principles are embedded within professional identity rather than introduced as post-hoc initiatives. State

policymakers can support this integration by requiring trauma-informed content within teacher and administrator preparation programs; incorporating trauma-informed competencies within licensure requirements; establishing continuing education requirements that include trauma-informed components; supporting development of trauma-informed curricula in educator preparation institutions; and creating specialist endorsements for advanced study. Embedding trauma-informed competencies at entry points into the profession reduces reliance on pilot-based professional development cycles and aligns with Chapter 4 findings identifying alignment as a sustainability driver.

Recommendation 15: Align State Policies and Accountability Systems. Ensure that state-level policies support rather than undermine trauma-informed practice. Chapter 4 findings demonstrated that sustainability was strengthened when trauma-informed principles were culturally embedded and weakened when structural conditions contradicted relational commitments. Policy incoherence can silently erode sustainability efforts.

State education agencies should therefore integrate trauma-informed approaches within state school improvement frameworks; align accountability systems with trauma-informed values by incorporating indicators of student wellbeing, belonging, engagement, and relational climate alongside academic performance; require evidence of trauma-informed discipline approaches as part of school approval or review processes; integrate trauma-informed perspectives into curriculum standards and instructional guidance; and remove policy barriers that conflict with trauma-informed principles, including rigid zero-tolerance discipline mandates.

Alignment does not require prescriptive uniformity across districts; instead, it requires coherence. When accountability systems reward exclusionary discipline or narrowly defined academic metrics without regard to relational climate, trauma-informed efforts are structurally

undermined. Conversely, when state policy reinforces relational practice and regulation instruction as legitimate educational priorities, local sustainability becomes more feasible. This recommendation flows directly from the implementation versus sustainability distinction developed in Sections 5.2 and 5.3. Outer-context policy conditions shape whether inner-context cultural embedding can endure.

Recommendation 16: Support Research on Sustainability and Scale-Up. Chapter 4 revealed that implementation and sustainability follow distinct logics, and that adaptation unfolds across extended time horizons. State agencies should therefore fund research explicitly examining sustainability and scale rather than limiting evaluation to pilot-era adoption metrics. Commission longitudinal studies tracking trauma-informed implementation 5–10 years beyond initial funding cycles. Support research identifying factors that predict long-term continuation rather than short-term uptake. Fund evaluations examining how trauma-informed practices adapt across diverse contexts including rural, urban, and high-poverty districts. Investigate effective strategies for scaling trauma-informed practices from pilot sites to broader district or statewide adoption. Disseminate findings in accessible formats to inform ongoing policy and funding decisions. This recommendation reflects the core contribution of this dissertation: sustainability must be studied as a distinct phenomenon. Without longitudinal inquiry, policymakers risk investing in models that appear successful during concentrated funding periods but fail to endure.

Recommendation 17: Develop State-Level Infrastructure for Trauma-Informed Practice. Sustainability requires outer-context stability. Chapter 4 data demonstrate that school-level endurance was shaped by broader funding structures, leadership continuity, and policy coherence. State agencies can reduce volatility by creating stable infrastructure. State agencies should establish a dedicated state-level office or coordinating position responsible for trauma-

informed initiatives. They should develop statewide guidance documents that articulate core principles while allowing contextual adaptation. They should create communities of practice connecting educators across districts. They should provide technical assistance to districts implementing trauma-informed approaches. They should maintain publicly accessible repositories of resources, exemplars, and evidence-informed practices.

Infrastructure reduces reliance on charismatic leadership or temporary champions. It creates continuity across political cycles and leadership transitions. However, infrastructure must avoid rigidity. It should support Flexible Fidelity rather than prescribe narrow implementation models.

This recommendation reflects the Cultural Fragility Paradox identified in Section 5.5.1.3. Cultural embedding is powerful but vulnerable. Structural infrastructure provides redundancy that strengthens long-term durability.

Recommendation 18: Address Elementary and Secondary Implementation Strategically. Although this study focused on high school settings, participants explicitly referenced research suggesting that earlier developmental intervention may yield stronger long-term impact. The tension between research evidence favoring elementary implementation and political realities prioritizing secondary contexts was documented in Chapter 4.

State policy should therefore support trauma-informed implementation across grade levels while recognizing developmental differences. Prioritize elementary implementation where early intervention may produce cumulative benefits. Simultaneously ensure that secondary schools receive adequate support given adolescent mental health needs and dropout risk. Fund research examining age-appropriate trauma-informed practices across developmental stages. Recognize that relational, regulatory, and belonging practices require contextual adaptation

across early childhood, middle school, and high school settings. This recommendation preserves the positional tension surfaced by systems-level participants in Chapter 4 and situates it within a developmental policy framework.

5.6.2.2. Recommendations for Researchers

Researchers occupy a distinct role in shaping how implementation and sustainability are conceptualized, measured, and evaluated. Chapter 4 findings revealed analytic gaps in how sustainability has historically been studied. The following recommendations extend directly from those gaps.

Recommendation 19: Investigate Sustainability as Distinct from Implementation Design. Design research that explicitly treats sustainability as analytically separate from implementation. Conduct longitudinal studies following implementation sites well beyond pilot funding periods. Identify factors predicting long-term continuation versus short-term adoption. Examine mechanisms through which practices transition from actively championed initiatives to culturally embedded norms. Investigate optimal timing for measuring sustainability outcomes. Develop and test core frameworks differentiating implementation drivers from sustainability drivers. This recommendation directly operationalizes the dissertation's central theoretical claim. Without analytic separation, sustainability remains assumed rather than empirically examined.

Recommendation 20: Study Adaptation Processes and Flexible Fidelity. Chapter 4 documented adaptation not as dilution but as contextual modification. Researchers should examine how trauma-informed practices evolve over time and what forms of adaptation support or undermine sustainability. Document how practices shift in language, format, and delivery under resource constraints. Identify core components versus adaptable features. Examine when adaptation strengthens contextual fit and when it erodes meaning-oriented integrity. Study how

Flexible Fidelity can be operationalized and measured. Develop frameworks guiding adaptation that preserve equity commitments while allowing pragmatic adjustment. This recommendation advances the Flexible Fidelity framework articulated in Section 5.3.2 and addresses tensions raised by the community-based participant regarding potential foundational dilution.

Recommendation 21: Examine Peer Influence and Social Network Mechanisms. Chapter 4 identified peer diffusion as a primary sustainability driver while also revealing perception-data tensions regarding spread. Researchers should investigate how trauma-informed knowledge and practices travel through social networks. Use social network analysis to map diffusion patterns across schools and districts. Identify characteristics of educators who function as informal influencers. Examine conditions that facilitate organic peer learning versus those that reinforce silos. Study how formal implementation structures interact with informal networks. Investigate strategies for accelerating diffusion without sacrificing practice quality. This recommendation builds directly on findings in Section 5.4.2 and preserves the divergence between practitioner perception and original pilot network data.

Recommendation 22: Investigate Cultural Embedding and Institutionalization. Chapter 4 demonstrated that trauma-informed practices sustained most robustly when culturally embedded yet remained vulnerable to leadership turnover. Researchers should examine how innovations become institutionalized within school culture. Study transitions from explicit initiatives to taken-for-granted professional norms. Examine the role of leadership continuity in maintaining cultural reinforcement. Identify indicators that signal cultural integration has occurred. Investigate how culturally embedded practices respond to leadership turnover or policy shifts. Explore relationships between cultural embedding, policy codification, and structural

supports. This line of inquiry deepens theoretical understanding of institutionalization processes and addresses the Cultural Fragility Paradox articulated in Section 5.5.1.3.

Recommendation 23: Examine COVID-19 Impact and Post-Pandemic Evolution. Researchers should study how the pandemic affected trauma-informed practice sustainability and evolution. Chapter 4 findings demonstrated that COVID-19 functioned as an unplanned durability test, revealing which practices transferred across modalities and which depended on coordinated structures that collapsed under disruption. Future research should document which trauma-informed practices proved resilient during remote and hybrid learning, examine whether pre-pandemic trauma-informed foundations measurably influenced school response capacity, investigate how trauma-informed practices have evolved in post-pandemic contexts rather than assuming return to baseline, study how trauma-informed concepts were extended to educator wellbeing and organizational stress; and examine perceived missed opportunities for system-level transformation.

This line of inquiry extends the dissertation's contribution regarding scale and systems-level dynamics. Chapter 4 demonstrated that adaptive capacity at the classroom level did not automatically produce macro-level redesign. Researchers should explicitly examine this micro-to-macro discontinuity in reform outcomes. Doing so would refine sustainability theory by differentiating resilience from transformation.

Recommendation 24: Investigate Equity Dimensions of Trauma-Informed Practice. Chapter 4 surfaced tension around language adaptation, universal framing, and structural critique. The community-based participant cautioned against erasure of systemic harm when trauma-informed discourse becomes normalized as "good teaching." This tension signals the need for sustained equity-centered inquiry.

Research should examine whether trauma-informed practices reduce, maintain, or inadvertently reproduce educational inequities, investigate differential impacts across racial, cultural, linguistic, and socioeconomic groups; study integration of trauma-informed and culturally responsive pedagogies; compare Western individually oriented trauma frameworks with Indigenous, relational, and community-based alternatives; and examine the extent to which trauma-informed practice addresses structural oppression versus reframing it in individualized terms.

This recommendation reinforces the dissertation's theoretical claim regarding Flexible Fidelity. Adaptation that increases sustainability must not obscure equity commitments. Researchers must examine when normalization protects practice and when it dilutes structural accountability.

5.6.2.3. Recommendations for Professional Development Providers

Professional development providers function as outer-context actors during implementation and often exit before sustainment conditions fully emerge. Chapter 4 findings demonstrated that tools and structures introduced during training did not automatically endure. The following recommendations reflect this empirical reality.

Recommendation 25: Emphasize Conceptual Understanding Over Specific Tools. Design professional development that builds deep concept-level understanding rather than attachment to specific instruments or branded protocols. Chapter 4 demonstrated that pulse oximeters disappeared while regulation instruction endured. Formats shifted. Language evolved. Core concepts persisted.

Professional development should therefore focus on why trauma affects cognition, emotion regulation, and relational engagement, teach brain science and stress response

mechanisms that enable educators to reason independently, provide frameworks for contextual adaptation, identify core principles that remain stable across format shifts, and build educator capacity for continued learning rather than reliance on trainer presence. This recommendation aligns directly with the Flexible Fidelity framework articulated in Section 5.3.2.

Recommendation 26: Build Capacity for Peer Learning. Chapter 4 consistently identified peer diffusion as a primary sustainability driver. Professional development should not position external expertise as the sole authority but should intentionally cultivate internal leadership. Train teacher leaders capable of mentoring colleagues after formal engagements conclude. Develop protocols for peer observation and structured feedback. Create communities of practice designed to continue beyond contracted training cycles. Teach facilitation skills for trauma-informed learning conversations. Establish cross-site networks that persist after initial funding ends. This recommendation reflects the hybrid diffusion model articulated in Section 5.4.2. External training should seed internal networks rather than replace them.

Recommendation 27: Address Implementation Barriers Directly. Participants repeatedly described resource constraints, time pressures, competing initiatives, and staff turnover as shaping sustainability. Professional development that ignores these constraints risks constructing models that collapse once trainer presence withdraws. Design training that openly addresses resource limitations and identifies low-cost alternatives. Support participants in integrating practices into existing routines rather than adding parallel programming. Anticipate resistance and provide strategic framing tools. Acknowledge initiative fatigue. Facilitate sustainability planning grounded in actual school conditions rather than idealized scenarios. Transparency regarding constraints strengthens rather than weakens implementation credibility.

Recommendation 28: Support Adaptation Within Core Principles. Rigid fidelity demands proved incompatible with 6-year sustainability under shifting conditions. Professional development should therefore explicitly distinguish between core principles and adaptable implementation features. Clarify which elements represent foundational anchors and which represent delivery formats. Provide frameworks for evaluating whether adaptations preserve essential mechanisms. Offer structured opportunities to practice modifying approaches for varied contexts. Affirm creative adaptation that maintains the strength of theoretical grounding and integrity. Position trainers as partners in thoughtful implementation rather than guardians of unmodified replication. This recommendation operationalizes Flexible Fidelity in practical training design.

Recommendation 29: Connect to Existing Values and Initiatives. Chapter 4 demonstrated that reframing trauma-informed practice as "good teaching" reduced resistance while maintaining depth of principle-level knowledge continuity. Professional development should leverage this insight strategically. Explicitly connect trauma-informed practices to relational pedagogy, student engagement, and academic success. Demonstrate alignment with brain science. Show how trauma-informed approaches integrate with social-emotional learning and equity initiatives rather than competing with them. Acknowledge educator expertise. Position trauma-informed practice as extension rather than replacement of professional identity. Strategic alignment enhances adoption without requiring ideological conversion.

Recommendation 30: Follow Up Beyond Initial Training. The Implementation Paradox identified in Section 5.3.1 revealed that intensive launch supports without sustained follow-up create fragility. Professional development must extend beyond initial sessions. Provide coaching or consultation during early implementation. Create structured reconvening

opportunities for reflection and problem solving. Offer responsive support as challenges emerge. Develop advanced learning opportunities that deepen practice-logic model understanding over time. Maintain relational connections that allow long-term consultation. Short-term inspiration without longitudinal scaffolding undermines sustainability. Training design should therefore reflect the multi-year timelines identified in Chapter 4.

5.7. Limitations and Future Research Directions

5.7.1. Study Limitations

The findings of this study must be interpreted within the context of several methodological and contextual limitations. First, the study focused on two high schools in Oregon that participated in a state-sponsored pilot study characterized by concentrated implementation support, structured coordination, and formal research partnership during the initial 3-year period. These contextual conditions shaped both implementation trajectories and subsequent sustainability dynamics observed in this study. Findings therefore may not generalize to schools implementing trauma-informed practices without comparable initial supports, to elementary or middle schools with different organizational structures, or to states operating under distinct policy environments. The relatively small sample size of eight participants, while appropriate for qualitative case study methodology and enabling deep exploration of layered institutional perspectives, does not permit statistical generalization.

Second, data collection relied on retrospective interviews conducted in Fall 2025. Participants were asked to reflect on experiences spanning up to 8 years, including the pilot period, post-pilot evolution, and the COVID-19 disruption. Although triangulation across diverse institutional roles strengthened interpretive credibility, retrospective accounts are subject to memory limitations, reconstruction influenced by present circumstances, and potential social

desirability bias. Participants may unintentionally reinterpret earlier events through current understandings of trauma-informed practice or through the lens of pandemic experience. Direct classroom observation, document analysis of implementation artifacts, or longitudinal survey data would have provided additional triangulation but were beyond the scope of this design.

Third, this study examined sustainability of practices rather than measuring student-level outcomes. Participants described perceived impacts on student regulation, relationships, belonging, and engagement. However, the study did not systematically analyze attendance trends, behavior referrals, graduation rates, academic performance, or student wellbeing indicators in relation to sustained practices. One implementation participant recalled improvements in graduation rates for specific student groups during the pilot period. However, these trends were reported anecdotally by participants and were not systematically analyzed as part of this study. As such, conclusions regarding durability should not be equated with evidence of continued effectiveness. The relationship between sustained trauma-informed practices and long-term student outcomes remains an open empirical question.

Fourth, while the study intentionally incorporated diverse role-based perspectives, certain voices were not included. Student perspectives on the evolution of trauma-informed practices were not directly represented. Parent and caregiver voices were not systematically collected. Teachers who were explicitly resistant to trauma-informed approaches or who disengaged from the work over time may be underrepresented. Additionally, educators who left the profession during or after the pandemic were not interviewed. These absences limit the range of experiential accounts and may skew interpretation toward participants who maintained some degree of engagement.

Fifth, the COVID-19 pandemic both strengthened and complicated the analytic frame. It functioned as a natural stress test of durability, illuminating which practices transferred under crisis conditions. However, the pandemic introduced unprecedented systemic disruption that makes isolating the influence of pre-existing trauma-informed foundations difficult. Pandemic-era adaptations may reflect broader emergency responses rather than solely trauma-informed capacity. Ongoing recovery conditions also mean that long-term post-pandemic trajectories are still unfolding. These limitations do not invalidate the study's findings. Rather, they clarify the boundaries within which interpretations should be situated.

5.7.2. Future Research Directions

The limitations identified above, together with the analytic contributions of this study, suggest several directions for future inquiry.

5.7.2.1. Longitudinal Mixed-Methods Sustainability Studies

Future research should extend beyond pilot timelines and combine qualitative examination of practice evolution with quantitative indicators of student outcomes. Studies following implementation sites for 7–10 years post-pilot could examine whether the sustainability drivers identified in this study predict improvements in attendance, belonging, behavior, and graduation outcomes. Mixed method designs would allow examination of both trajectory and impact.

5.7.2.2. Comparative Implementation Models

Research comparing sustainability across different implementation pathways would clarify whether the Implementation Paradox identified in this study operates across contexts. Comparative case studies might examine schools implementing trauma-informed practices through intensive state pilots, district-led initiatives, grassroots teacher efforts, or mandated

policy integration. Such comparisons could illuminate trade-offs between rapid, comprehensive adoption and gradual, sustainable embedding.

5.7.2.3. Student-Centered Sustainability Research

Future work should center student perspectives on the sustainability of trauma-informed practices. Research could investigate how students experience evolved versus discontinued practices, whether universal application affects stigma or belonging, and how students interpret shifts in language from explicit trauma framing to "good teaching" terminology.

5.7.2.4. Student Voice Limitation

While this study intentionally centered educator, coordinator, researcher, and community-level perspectives to understand sustainability mechanisms within institutional systems, it did not include direct student interviews. The unit of analysis was participant account of practice trajectory rather than student experience of those practices. As a result, the findings illuminate structural, cultural, and organizational dynamics, shaping durability, but they do not capture how students perceived the evolution, disappearance, or normalization of trauma-informed practices over time.

Student perspectives may differ in important ways. Students may experience relational openings, regulation routines, and shifts in language differently than educators interpret them. They may also perceive discontinuities that educators view as adaptive evolution. The absence of student voice therefore limits conclusions regarding lived experience of sustained practices, even as the study provides insight into institutional sustainability mechanisms. Future research should explicitly examine how students experience trauma-informed practice durability, including whether universalization reduces stigma, whether language reframing alters meaning, and whether sustained practices meaningfully shape belonging, safety, and engagement.

5.7.2.5. Equity-Focused Investigations

Given tensions raised by participants regarding universalization, language reframing, and structural critique, future research should explicitly examine relationships between trauma-informed sustainability and equity outcomes. Studies could assess whether sustained practices reduce disparities in discipline, attendance, or academic outcomes; how trauma-informed approaches intersect with culturally responsive pedagogy; and whether reframing obscures or reinforces systemic inequities.

5.7.2.6. Implementation Science Theory Development

Continued theoretical work is needed to develop frameworks that explicitly differentiate implementation from sustainability. Research might test the "Flexible Fidelity" concept and identify conditions under which adaptation supports versus undermines sustainability, investigate the Implementation Paradox (intensive support creating unsustainable dependencies) across different innovations and contexts, develop and validate instruments measuring sustainability drivers distinct from implementation drivers, and create integrated frameworks guiding both implementation and sustainability.

5.7.2.7. Educator Wellbeing and Organizational Stress

Future research should examine relationships between educator wellbeing, organizational stress, and capacity for trauma-informed practice. Studies might investigate how trauma-informed approaches to educator support affect sustainability of student-focused practices, examine organizational conditions that enable or undermine trauma-informed implementation, study effects of applying trauma-informed principles to adult interactions within schools, and identify system-level changes needed to create conditions supporting both educator and student wellbeing.

5.7.2.8. Scale-Up and System Transformation

Research examining how trauma-informed practices move from pilot sites to broader implementation and from school-level to system-level change. Studies might investigate effective strategies for scaling trauma-informed practices across districts or states, examine barriers to system-level transformation identified by community organization participants, study relationships between school-level capacity and system-level change, and identify policy levers supporting sustainable trauma-informed practice at scale.

5.7.2.9. Alternative Frameworks and Approaches

Future research should examine diverse conceptualizations of trauma-informed practice, particularly Indigenous, community-based, and non-Western frameworks. Studies might compare Western individually focused approaches with community healing and cultural strengths perspectives, investigate integration of different trauma-informed frameworks, examine whether alternative approaches demonstrate different sustainability patterns, and explore how cultural context shapes trauma-informed practice implementation and evolution.

5.8. Conclusion

This study investigated what happened in the 6 years following Oregon's ambitious 2016–2019 Trauma-Informed Practices Pilot Study, examining sustainability through the lens of diverse participants and the unprecedented test of the COVID-19 pandemic. The findings tell a story far more nuanced than simple success or failure. They reveal selective sustainability driven by practice characteristics often invisible in implementation research: simplicity that enables continuation without ongoing support, alignment with educator values that reduces resistance, embeddedness in daily routines that outlasts special programs, and flexibility that allows adaptation to changing contexts.

Findings presented in Chapter 4 reveal selective sustainability rather than wholesale abandonment or perfect preservation. Sustained practices shared simplicity, low resource requirements, and value alignment; resource-dependent practices disappeared; several practices evolved in format and framing; the pandemic functioned as an unplanned durability test; and sustainability factors differed from implementation factors. This chapter synthesizes those findings, situates them in existing literature, elaborates theoretical and practical implications, and advances recommendations aligned to the roles of leaders, policymakers, professional development providers, and researchers.

The findings extend implementation science by empirically differentiating adoption drivers from sustainment conditions within a longitudinal qualitative design. They contribute to trauma-informed scholarship by identifying strategic reinvention and universal framing as mechanisms for mediating tensions between fidelity and contextual viability. They refine reform sustainability literature by distinguishing structural complexity from practice-logic depth and by identifying cultural integration, peer diffusion, and Flexible Fidelity as central mechanisms of durability.

This distinction challenges prevailing assumptions within educational reform and implementation science. Sustainability did not emerge as the final stage of successful implementation. It operated according to a different logic. Intensive scaffolding accelerated adoption but did not guarantee endurance. What endured were practices that fit daily classroom realities, aligned with educator values, and could continue without specialized roles or ongoing external funding. This Implementation Paradox requires reconsideration of how reforms are designed, funded, and evaluated.

Sustainable reform requires designing for continuation from the outset rather than assuming comprehensively implemented practices will somehow persist after support ends. Perhaps most importantly, this study demonstrates possibilities for trauma-informed practice beyond pilot stages. The finding that practices can evolve and adapt rather than disappearing or remaining frozen suggests that sustainability is better understood as ongoing transformation rather than static preservation.

Professional development learning shifted from coordinator-led models to peer-sustained exchange. Explicit "trauma-informed" language often gave way to framing grounded in "good teaching". These evolutions maintained core concepts while adapting to resource constraints, technological changes, and cultural contexts. They demonstrate that sustainable trauma-informed practice does not require perfect preservation of original implementation but rather fidelity to core principles combined with permission to adapt.

The pandemic clarified scale-related limits of sustainability. Trauma-informed foundations supported adaptive classroom responses, yet school-level resilience did not automatically produce system-level transformation. Sustainability proved more achievable at micro and meso levels than at macro policy levels. This distinction underscores the necessity of structural reinforcement beyond school boundaries.

Practically, the study suggests that durable trauma-informed reform rests less on formal infrastructure and more on the fit between small, usable practice kernels and educator identity, supported by peer diffusion and light codification within existing systems. The most reliable investments are those that embed simple routines into daily instruction, cultivate peer exemplars, integrate language into leadership communication, and maintain visible but low-burden documentation mechanisms.

The findings also caution against overreliance on intensive pilot models that withdraw support abruptly. Reform efforts that prioritize comprehensive short-term implementation without building internal capacity risk creating unsustainable dependency. Designing for continuation from the outset is not an ancillary consideration; it is central to reform integrity.

The recommendations presented in this chapter aim to support educational leaders, policymakers, researchers, and professional development providers in building trauma-informed systems capable of enduring beyond pilots and withstanding disruptions. They call for fundamental shifts: from intensive short-term implementation to sustainable long-term embedding, from dependence on external expertise to building internal capacity, from rigid fidelity to flexible adaptation, from standalone initiatives to systematic integration, from crisis response to proactive culture building.

As documented in Chapter 1, schools continue to face elevated mental health needs, chronic absenteeism, and behavioral challenges. Understanding which practices endure and the conditions that enable durability are essential to ensure that trauma-informed investments yield lasting benefits. As schools continue to confront elevated mental health needs, chronic absenteeism, and widening inequities, trauma-informed approaches remain in equity-relevant frameworks rather than optional enhancements. The question is not whether such approaches matter, but whether educational systems will design them to last.

This study began by noting two transformative developments in American education: growing recognition of trauma's impact on learning and unprecedented disruption caused by the COVID-19 pandemic. At their intersection lies evidence that trauma-informed practices, when implemented with attention to sustainability, can endure and adapt through even the most challenging circumstances. The question now is whether we will learn from these experiences to

build educational systems truly capable of supporting all students through whatever challenges the future brings.

As schools emerge from the COVID-19 pandemic into an educational landscape shaped by collective trauma, the question is no longer whether to adopt trauma-informed practices, but how to ensure these practices endure and evolve to meet ongoing challenges. The schools in this study, having established trauma-informed foundations prior to the pandemic, were better positioned to respond when disruption occurred. Their experiences suggest that investment in trauma-informed approaches represents not only support for students currently experiencing adversity, but also preparation for challenges that cannot yet be anticipated.

The path forward requires acknowledging that existing approaches have not served all students equitably, committing to sustained investment despite resource constraints, and recognizing that durable change unfolds over years, not months. It calls for choosing simplicity over comprehensiveness when resource realities demand it, trusting educators to adapt practices thoughtfully instead of requiring rigid compliance, and cultivating cultures in which trauma-informed approaches become embedded in everyday teaching, rather than remaining initiatives that depend on continuous advocacy.

At its core, this study affirms that trauma-informed education is not sustained through rhetoric or policy declaration alone. It endures through relational practice, explanatory clarity, cultural embedding, and adaptability under constraint. Sustainability is not static preservation; it is adaptive endurance. Most fundamentally, it requires remembering why trauma-informed practices matter. Behind every practice that sustained or disappeared, behind every evolution and adaptation, are students navigating trauma's impacts on their learning and development. The sustained practices identified in this study (checking in on student emotional state, building

trusting relationships, teaching regulation strategies, providing breaks, understanding how stress affects learning) represent commitments to seeing students fully, supporting their needs comprehensively, and creating conditions where healing and learning can occur simultaneously. When these practices endure beyond pilots, when they weather leadership changes and budget cuts and pandemics, when they evolve to meet new challenges while maintaining core commitments, they fulfill the promise that trauma-informed education represents that schools can become places of safety, connection, and possibility for all students, especially those whom traditional systems have failed.

This dissertation demonstrates that sustainability of trauma-informed educational reform does not emerge automatically from successful implementation. Long-term continuation depends on distinct conditions: practices must be usable without ongoing external support, aligned with educator professional identity, embedded within everyday instructional routines, and flexible enough to adapt under changing organizational constraints. By empirically distinguishing adoption drivers from sustainment mechanisms across a 6-year post-pilot period, this study reframes sustainability not as the final stage of implementation but as adaptive endurance shaped by cultural embedding, peer diffusion, and contextual fit.

APPENDICES

APPENDIX A

NON-SCHOOL-BASED STAKEHOLDER SEMI-STRUCTURED INTERVIEW PROTOCOL

Participant Background Information (Collected Prior to Interview)
The following information was collected prior to the interview to understand participants' advisory, oversight, or policy roles related to the TIP pilot. Background information was used solely to contextualize questioning and tailor interview questions and was not treated as analytic data.

Name:
Email:
Availability (scheduling only):
Current or Most Recent Work Setting:
Current Role or Position:
Years of Experience in Education or Policy:
Years Connected to TIP-Related Work:
Highest Level of Education:
Specialized Certifications or Endorsements:
Employer during Fall 2016–Summer 2019 (include years):
Role in the TIP pilot or advisory committee:
Level of involvement:
If post-pilot involvement, year began:

Interview Introduction and Consent Script
Hello, and thank you for meeting with me today. My name is Caitlin Gonzales Aleksick, and I am a doctoral researcher at the University of Oregon examining the long-term sustainability of Oregon's 2016–2019 Trauma-Informed Practices pilot. This interview focuses on system-level and policy perspectives. Participation is voluntary and confidential, and interviews will be audio-recorded with permission.

Interview duration: approximately 45–60 minutes.

Opening
1. Can you describe your role during the TIP pilot from 2016–2019?
2. What was your understanding of the TIP Advisory Committee's charge?

Design and Implementation
3. From your perspective, what made the pilot unique or innovative?
4. What implementation challenges emerged, and how were they addressed?
5. What systemic barriers to trauma-informed practice were identified?

Sustainability and Systems
6. What sustainability planning occurred during or after the pilot?
7. What factors were most critical for sustaining practices beyond funding?
8. How did the committee envision scaling practices statewide?

9. What policy or systemic changes were recommended?

COVID-19 Context and Adaptation

10. How do you believe the pilot prepared the state to respond to student trauma during COVID-19?
11. Which elements of the pilot proved most resilient during that period?
12. Which aspects of trauma-informed practice became most critical during COVID-19?

Core Components and Return on Investment

13. If designing a trauma-informed initiative today with limited resources, what would you keep or let go?
14. What do you believe is truly worth the investment now?
15. What distinguishes trauma-informed practice as a transformative approach?

Evidence and Impact

16. What outcomes or indicators were most compelling during the pilot?
17. What lasting policy or system shifts have you observed since the pilot concluded?
18. What impact do you believe the pilot had on long-term student well-being?

Leadership Reflection and Closing

19. What were the most significant lessons learned from your role?
20. If Oregon launched a similar pilot today, what should be done differently or kept the same?
21. If speaking with skeptical policymakers or funders, what would you want them to understand most?

APPENDIX B

SCHOOL-BASED STAFF SEMI-STRUCTURED INTERVIEW PROTOCOL

Participant Background Information (Collected Prior to Interview)
The following information was collected through recruitment correspondence and confirmed at the start of the interview to understand participants' roles, experience, and level of involvement in the Trauma-Informed Practices (TIP) pilot. Background information was used solely to contextualize questioning and tailor interview questions and was not treated as analytic data. Participants who entered after the pilot were asked to reflect on inherited practices rather than implementation experiences.

Name:
Email:
Availability (scheduling only):
Years of Experience in Education:
Years at School, District, or Agency:
Highest Level of Education:
Specialized Certifications or Endorsements related to student or youth support, counseling, and/or trauma-informed practice:
Employer during Fall 2016–Summer 2019 (school/district/agency and years):
Role in the TIP pilot:
Level of involvement in TIP implementation:
If post-pilot hire, year began at site:

Interview Introduction and Consent Script
Hello, and thank you for meeting with me today. My name is Caitlin Gonzales Aleksick, and I am a doctoral researcher at the University of Oregon conducting a longitudinal study examining the sustainability of Oregon's 2016–2019 Trauma-Informed Practices pilot. Participation is voluntary, and your identity and responses will remain confidential. With your permission, this interview will be audio-recorded to ensure accuracy. A brief summary of key points will be shared for member checking.

Interview duration: approximately 45–60 minutes.

Opening
1. Just to confirm, you were in your role during the TIP pilot from 2016–2019. Are you currently in the same role or a different position?
2. What was your understanding of the trauma-informed practices model and the purpose of the pilot?

Implementation and Sustainment

3. What trauma-informed practices were most consistently adopted during the pilot? Are they still in use today?
   Probe: Can you share a specific example?

4. How consistently are trauma-informed practices applied in your school today?
5. What lasting changes do you attribute to the trauma-informed work from the pilot years?
   Probe: Are there routines, language, or norms that are still present?
6. What supports helped sustain TIP practices after pilot funding ended? What barriers emerged?

COVID-19 Context and Adaptation

7. How well did the TIP pilot prepare your school to address student needs during COVID-19?
8. After experiencing collective trauma through COVID-19, which aspects of trauma-informed practice feel more essential now than in 2019? Which feel less relevant?
9. What practices from the pilot proved most resilient during the pandemic? Which were the first to disappear when conditions became more challenging?

Core Components of Trauma-Informed Practice

10. If you could retain only three components of the TIP pilot, what would they be and why?
11. If trauma-informed practice could be reduced to its essential core, what would you say matters most?
12. If advising a school beginning trauma-informed work today with limited resources, what would you recommend prioritizing?
13. Approximately what percentage of the pilot training content was essential versus helpful but not necessary?

Student Impact

14. What changes did you observe in students during and after the pilot? Did any persist over time?
15. What impact do you believe the pilot had on long-term student well-being?

Reflections

16. What were the greatest strengths of the TIP pilot?
17. What gaps or limitations did you observe?
18. If the state relaunched this initiative today, what would you change and what would you keep?

Closing

19. If speaking with someone skeptical about trauma-informed initiatives, what would you want them to understand most?

APPENDIX C

RECRUITMENT EMAIL FOR TIP DISSERTATION

Good xxx,

My name is Caitlin Gonzales Aleksick, and I am a doctoral candidate at the University of Oregon studying the long-term sustainability of trauma-informed educational practices in Oregon.

I'm reaching out because of your involvement with the Oregon Department of Education's Trauma-Informed Practices Pilot Study (2016-2019). Your knowledge and experience would provide valuable insight for my dissertation research.

About the Study: My research examines what happened to trauma-informed practices after the pilot concluded, particularly through the COVID-19 pandemic. I'm exploring how these practices evolved under systemic stress, whether they remain embedded in schools, and what sustained beyond the initial implementation period.

Participation: I'm inviting individuals with knowledge of or experience with the original pilot to participate in a qualitative interview about your observations and perspectives, I value all voices and experiences. I will be providing a $20 Amazon GC after the interview, which has been approved by the University of Oregon's Institutional Review Board.

Next Steps: If you're interested, please complete this brief survey/informed consent: TIP Dissertation Study Survey

I would also appreciate any suggestions of other individuals involved with the pilot whom I could contact about participating.

Thank you for considering this invitation. Your perspective would be invaluable to understanding the long-term impact of Oregon's work in trauma-informed education.

Warmly,
Caitlin Gonzales Aleksick

APPENDIX D

FINAL CODEBOOK AND VERSION HISTORY

Section A: Final Parent Codes

The qualitative analysis employed eight finalized parent codes. These parent codes constitute the stable analytic framework applied consistently across all interview transcripts. Each parent code functions as an analytic container rather than a mutually exclusive category, and multiple parent codes were applied to individual excerpts as appropriate. All code revisions resulted from researcher memoing and analytic comparison.

1. Implementation Process

Captures how the trauma-informed pilot was designed, organized, and enacted. Includes grant structure and timeline, governance and decision-making, coordinator role design and evolution, implementation facilitators and barriers, resource constraints, and tensions between system-level expectations and school-level realities.

2. Knowledge & Frameworks

Captures the conceptual foundations informing practice. Includes the Neurosequential Model in Education (NME), brain-science concepts, shifts from behavioral to biological understandings, shared language development, and integration across multiple trauma-informed or restorative frameworks.

3. Practices & Strategies

Captures specific trauma-informed practices and professional learning strategies implemented during or after the pilot. Includes regulation techniques, environmental modifications, relationship-based approaches, discipline practices, professional learning structures, and data use or monitoring tools.

4. Outcomes

Captures perceived and documented impacts associated with the pilot. Includes student academic and behavioral outcomes, belonging and engagement, staff mindset and practice change, and organizational or cultural shifts within schools.

5. Sustainability

Captures what persisted, disappeared, or evolved following the pilot period. Includes durability of practices, conditions enabling or constraining continuation, loss of funding or personnel, organic spread or adaptation, and political or system-level threats to continuation.

6. COVID-19 Impact

Captures the influence of the COVID-19 pandemic as a contextual disruptor and stress test. Includes pandemic-related disruptions, rapid adaptations, collective trauma conditions, practices tested under stress, and post-pandemic shifts.

7. Equity & Context
Captures equity-related framing, intentions, and contextual influences. Includes belonging and targeted universalism, cultural responsiveness, school culture and readiness, and broader political or social context shaping implementation and sustainability.

8. Research & Evaluation
Captures tensions related to research design and evaluation. Includes evaluation limitations, misalignment between state-level and practitioner priorities, reporting accuracy concerns, and distinctions between implementation metrics and sustainability indicators.

Section B: Codebook Version History
The qualitative codebook developed through iterative refinement across the analytic process. Initial coding employed a broader set of provisional parent categories to preserve analytic openness and capture variation across participant roles, implementation contexts, and time. As transcripts were coded and compared, substantial conceptual overlap among early categories became apparent. Through repeated cross-case comparison and analytic memoing, overlapping categories were consolidated into eight analytically sufficient parent codes that could be applied consistently across all transcripts. This consolidation increased coherence while retaining conceptual depth.

Sustainability emerged as the central integrative construct linking implementation processes, practice evolution, outcomes, and contextual disruption, including the COVID-19 pandemic. Following this consolidation, the parent-code structure was stabilized. Subsequent analytic refinement occurred at the child-code and memo level rather than through further modification of parent codes. This finalized codebook provided the analytic foundation for cross-case synthesis and interpretation presented in Chapters 4 and 5.

APPENDIX E

ANONYMIZED ROLE CROSSWALK AND DE-IDENTIFICATION SCHEME

This appendix documents the procedures used to anonymize study participants and protect confidentiality while maintaining analytic clarity. Given the small sample size, leadership-level roles, and the public nature of the Oregon Trauma-Informed Practices (TIP) Pilot, a role-based deidentification approach was used to reduce the risk of deductive disclosure.

All participants were assigned role-based pseudonyms rather than personal identifiers. The identifiers in Table D1 reflect functional role categories, not job titles, schools, or districts.

Table E1

Anonymized Role Crosswalk

Anonymized ID	Role Category	System Level	Data Source
SB-L1	School-Based Leadership	School level	Semi-structured interview
SB-L2	School-Based Leadership	School level	Semi-structured interview
SB-P	School-Based Practitioner	Classroom level	Semi-structured interview
ER	External Reviewer/ Research Partner	State/regional	Semi-structured interview
SPD	State Policy Design	State agency	Semi-structured interview
IC	Implementation Coordinator	State–district intermediary	Semi-structured interview
CO-A	Community Organization Affiliate	Community-based	Semi-structured interview
CO-P	Community Organization Partner	Community-based	Semi-structured interview

Deidentification Scheme

To protect participant confidentiality, the following procedures were applied consistently across transcripts, analytic memos, and dissertation text:

- Personal names, school names, district names, and geographic identifiers were removed or replaced with neutral descriptors (e.g., “the pilot high school,” “the district”).
- Exact job titles were generalized into functional role categories to avoid deductive identification.
- Dates and timelines were referenced broadly (e.g., “during the pilot period,” “post-COVID”).
- Participants were referenced using role-based pseudonyms (e.g., SB-L1, ER, SPD) rather than names or titles.
- Numeric suffixes distinguish participants in similar roles without implying hierarchy or chronology.
- The role crosswalk linking pseudonyms to role categories was maintained separately from raw data and was not shared publicly.

APPENDIX F

COPILOT PROMPT AND AI-ANALYTIC BOUNDARIES

This appendix documents the use of Microsoft Copilot as a bounded analytic support tool during qualitative data analysis. It is provided to ensure transparency regarding the specific analytic prompt used and to explicitly articulate the limits of AI involvement in the analytic process. The use of AI described herein is consistent with University of Oregon dissertation standards and Institutional Review Board (IRB)-approved research procedures.

AI Analytic Prompt

Microsoft Copilot was used to assist with initial thematic structuring of interview transcripts. The following prompt was applied consistently during early stages of analysis to support provisional category identification and organizational pattern recognition. AI-generated outputs were retained as analytic artifacts and did not constitute data, codes or findings.

Imagine you are a researcher and an expert in the analysis of qualitative data, such as transcripts from semi-structured interviews. Analyze the following interview transcript using thematic analysis. Assign categories only to participant responses, not to interview questions. Categories should represent abstract summaries of the content.

The transcript reflects professional reflections on a trauma-informed pilot study conducted in two high schools, focusing on lived experiences, role-based meaning-making, implementation dynamics, and mid- to long-term sustainability.

Do not generate more than ten categories. For each category, identify two representative quotations of at least three sentences. Present results in table format with columns for: (1) category name, (2) category description, (3) example quotations, (4) speaker role and transcript location, and (5) number of participants referencing the topic.

AI-Analytic Boundaries and Researcher Role

Copilot was used as a constrained analytic support tool and did not function as an independent analyst. The AI did not determine final codes, define themes, interpret meaning, apply theoretical constructs, or synthesize findings. All analytic decisions including category refinement, cross-role comparison, and interpretive conclusions were made by the researcher.

- AI-generated outputs were treated as provisional and subject to critical human review, revision, or rejection.
- Final thematic categories were developed through iterative, researcher-led coding and analytic memoing.
- AI assistance was limited to organizational support and early pattern surfacing, not evaluative judgment, interpretation, or theory-building.
- Analytic products presented elsewhere in the dissertation reflect researcher-refined interpretations rather than unedited AI output.

This bounded use of AI ensured analytic rigor, interpretive accountability, and ethical compliance while supporting systematic engagement with qualitative data.

APPENDIX G

PER-TRANSCRIPT CODING TABLES

The coding tables below, Tables G1–G8, reflect analytic application rather than quantitative prevalence.

Table G1

SPD Per-Transcript Coding Table

Parent Code	Code Description	Example Quotes (Paraphrase/Cite)	Speaker & Location	Participants
Implementation Process	Describes the policy origins and governance structure of the TIP pilot, including development of a Policy Option Proposal (POP), inter-agency coordination, superintendent advocacy, and political negotiation that shifted the pilot focus from elementary to high school settings.	Explains POP writing through the Chief Education Office; describes superintendent study groups, community organization alignment, and political dynamics shaping pilot design and funding.	SPD, early interview (policy and governance discussion)	1
Knowledge & Frameworks	Articulates a theory of change linking trauma exposure, inequitable services, and chronic absenteeism, while critiquing the limits of ACEs research and the term "trauma" as a policy and conceptual construct.	Discusses trauma–attendance logic used to justify funding; critiques trauma terminology; references resilience and survivorship frameworks.	SPD, conceptual framing discussion	1
Practices & Strategies	Identifies specific practices understood as trauma-informed, including formative assessment for predictability, staff self-reflection on ACEs, and environmental decisions such as SRO placement.	Frames formative assessment as trauma-informed due to predictability; describes staff ACEs processing and school space redesign decisions.	SPD, implementation examples	1

Parent Code	Code Description	Example Quotes (Paraphrase/Cite)	Speaker & Location	Participants
Outcomes	Frames outcomes as staff learning, professional reflection, and system-level insight rather than immediate student-level metrics.	Notes Year 1 focus on staff capacity building and professional learning.	SPD, discussion of early outcomes	1
Sustainability	Conceptualizes sustainability as diffusion of trauma-informed practices into later leadership roles rather than continuation of formal pilot structures.	Describes carrying pilot-derived practices into later principalships.	SPD, post-pilot professional reflections	1
COVID-19 Impact	Describes COVID-19 as a disruption to implementation and evaluation that simultaneously highlighted the value of prior staff trauma-informed preparation.	Suggests schools were better prepared during COVID-19 due to earlier trauma-informed work.	SPD, pandemic reflections	1
Equity & Context	Links trauma-informed policy to racial, socioeconomic, and structural inequities while describing tensions around equity-explicit political language.	Discusses biased trauma related to racism and sexism; emphasizes political sensitivity of language.	SPD, equity and language discussion	1
Research & Evaluation	Describes early evaluation design, including intervention and comparison schools, formative and summative instruments, and advisory activities.	Explains two-intervention/two-comparison school design and early advisory meeting focus.	SPD, evaluation and advisory discussion	1

Table G2

IC Per-Transcript Coding Table

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
Implementation Process	Describes entering the pilot mid-stream and assuming responsibility for managing grant implementation, including deliverables, coordination with state partners, work-plan development, and navigating top-down expectations from ODE while responding to school-level realities.	Explains reclassification of the coordinator role to a confidential manager and responsibility for coordinating training, reporting, and partner collaboration.	IC, early interview (role and governance discussion)	1
Knowledge & Frameworks	Emphasizes the neurosequential model of education as a unifying neuroscience framework to understand trauma, stress regulation, and learning, selected to create coherence across competing trauma-related models.	Discusses choosing a brain-based framework to help staff integrate multiple trauma-informed approaches.	IC, discussion of models and theory	1
Practices & Strategies	Describes shifting away from lengthy theoretical professional development toward brief, practical strategies and relational practices, including square breathing, regulation routines, coffee chats, and voluntary staff engagement.	References replacing 90-minute trainings with actionable micro-strategies and informal relational opportunities.	IC, implementation examples	1
Outcomes	Reports perceived improvements in staff engagement, school climate, graduation rates, and disciplinary trends, alongside uneven effects on chronic absenteeism and selective emphasis in reporting.	Notes increase in graduation rates and declines in disciplinary referrals while absenteeism did not decrease.	IC, outcomes discussion	1
Sustainability	Frames sustainability through extended funding, continued coordinator presence into a fourth year, and diffusion of trauma-informed practices into everyday school routines and district roles.	Describes continuation of practices beyond the formal pilot period.	IC, post-pilot reflections	1

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
COVID-19 Impact	Describes the pandemic as disrupting implementation trajectories while underscoring the importance of regulation, belonging, and relational practices, prompting a shift toward SEL grounded in community voice.	Discusses disruption of trends and transition to SEL focused on belonging during COVID-19.	IC, pandemic discussion	1
Equity & Context	Frames trauma-informed work through an equity lens emphasizing belonging, non-weaponized language, and targeted universalism to address varied needs across staff and student groups.	Describes equity as broadening perspectives and attending to groups who did not feel belonging.	IC, equity and belonging discussion	1
Research & Evaluation	Reflects on how evaluation prioritized selected state metrics, contested which outcomes counted, and revealed tensions between formal reporting and on-the-ground evidence.	Discusses political considerations influencing which outcomes were emphasized in evaluation.	IC, evaluation reflections	1

Table G3

CO-A Per-Transcript Coding Table

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
Implementation Process	Describes participation on the ODE Trauma-Informed Practices Advisory Committee as a nonprofit intermediary representative, with a primary focus on early-stage principles development and contextual understanding rather than direct pilot design or site-level implementation.	Explains being invited to serve on the advisory committee and contributing to early work defining statewide trauma-informed principles and hearing site progress updates.	CO-A, early interview (advisory role discussion)	1
Knowledge & Frameworks	Emphasizes a principles-first approach to trauma-informed practice, drawing on organizational development frameworks such as the Missouri Model and highlighting Trauma Informed Oregon as a key statewide thought partner.	Discusses using staged organizational development frameworks and referencing Trauma Informed Oregon for guidance and capacity-building.	CO-A, discussion of frameworks and models	1
Practices & Strategies	Describes preferred strategies centered on capacity building, staff training, and practice-level “kernels” rather than scripted curricula, with an emphasis on principal coaching and classroom-level relational practices.	Refers to providing training, focusing on practical classroom practices, and supporting educators in identifying and addressing their own problems of practice.	CO-A, practice and training discussion	1
Outcomes	Frames outcomes cautiously, noting that trauma-informed practice was already a broader movement and that impacts cannot be attributed solely to the pilot, though ODE’s engagement with SEL and mental health is viewed as a positive signal.	Notes that the existence of the pilot and ODE attention to trauma-informed practice represents progress despite difficulty measuring discrete outcomes.	CO-A, outcomes reflection	1

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
Sustainability	Raises concerns about the limitations of pilot-based funding models and emphasizes the need for diffusion beyond single sites, multiple champions, and funding approaches that support long-term system integration.	Questions whether large pilot investments without statewide rollout plans support sustainable change and suggests alternative funding models.	CO-A, sustainability discussion	1
COVID-19 Impact	Describes the pandemic as amplifying attention to trauma-informed practice and student mental health, enabling organizations such as Trauma Informed Oregon to expand reach, while also highlighting political and implementation constraints.	Discusses increased urgency during COVID-19 alongside challenges posed by shifting political contexts.	CO-A, COVID-19 discussion	1
Equity & Context	Explains that Oregon's equity lens related to trauma-informed practice has grown more sophisticated over time and stresses the importance of reflexive practice to avoid inequitable or culturally disconnected implementations.	References concern about trauma-informed models lacking equity considerations and emphasizes belonging and justice.	CO-A, equity discussion	1
Research & Evaluation	Describes early advisory contributions to defining trauma-informed principles and identifies a gap in school-specific observational tools for evaluating trauma-informed practice in educational settings.	Notes development of an early principles document and lack of formal school-based observation tools.	CO-A, evaluation and tools discussion	1

Table G4

CO-P Per-Transcript Coding Table

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
Implementation Process	Describes limited participation as a community-based partner who attended advisory meetings and shared relational, strength-based approach, without ongoing involvement in pilot design or implementation.	Explains being invited to meetings, attending with a colleague, and offering perspectives from Native community-based practices.	CO-P, early interview (advisory participation)	1
Knowledge & Frameworks	Centers trauma-informed work within the Relational Worldview Model and medicine wheel framework, emphasizing holistic balance across mind, body, spirit, and context as a longstanding organizational approach.	References use of the relational worldview and medicine wheel to guide planning, goal setting, and trauma-informed support.	CO-P, discussion of frameworks	1
Practices & Strategies	Emphasizes relationship-based, strength-focused practices including listening first, clear communication, shared decision-making, and creating supportive environments that reduce harm and build trust.	Describes focusing on dialogue, authenticity, and meeting people where they are rather than directing or prescribing solutions.	CO-P, practice discussion	1
Outcomes	Highlights organizational and relational outcomes such as increased trust, engagement, and protective factors for youth through multiple supportive adult relationships rather than discrete academic metrics.	Notes importance of creating trusting relationships and supportive networks for youth and families.	CO-P, outcomes reflection	1
Sustainability	Frames sustainability through long-term use of relational and community-guided approaches, supported by wraparound services and continued responsiveness to community input.	Mentions that relational worldview practices have been used since the early 2000s and remain central to organizational work.	CO-P, organizational history	1

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
COVID-19 Impact	Reflects that COVID-19 represented a missed opportunity for systemic redesign in schools, noting limited adaptation despite lessons learned about flexibility and stress.	Discusses disappointment that systems largely returned to pre-pandemic practices rather than shifting approaches.	CO-P, pandemic reflection	1
Equity & Context	Situates trauma-informed practice within a Native and community context, acknowledging historical and current trauma, cultural specificity, and concerns with deficit-based language such as “grit” or “resilience.”	Describes preference for strength-based language and recognition of ongoing systemic and cultural inequities.	CO-P, equity and community discussion	1
Research & Evaluation	Notes that advisory contributions and community input were not consistently followed by feedback or evaluation loops and that chronic absenteeism metrics often overlook root causes.	References lack of follow-up about study outcomes and the need to examine underlying barriers to attendance.	CO-P, evaluation discussion	1

Table G5

SB-L2 Per-Transcript Coding Table

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
Implementation Process	Describes entering the study context at the end of the pilot and learning about school-level trauma-informed strategies through existing leadership, with decisions about continuation and adaptation occurring locally rather than through direct study design involvement.	Explains learning from prior coordinators about trauma-informed initiatives already underway and discussing which elements to continue promoting.	SB-L2, onboarding and early leadership discussion	1
Knowledge & Frameworks	Defines trauma-informed practice as a student-centered framework that considers students lived experiences in shaping school systems, structures, and decision-making, often alongside equity lenses.	Describes understanding trauma-informed practice as integrating awareness of adverse experiences into instructional, disciplinary, and organizational decisions.	SB-L2, definition discussion	1
Practices & Strategies	Highlights concrete classroom and schoolwide strategies such as mindfulness routines, mood check-ins, regulation spaces, and staff attention to co-regulation and restorative practices.	References use of mood meters, regulation rooms, structured breaks, and restorative responses to student dysregulation.	SB-L2, school practice examples	1
Outcomes	Describes perceived cultural and relational outcomes, including sustained staff attention to students' emotional states and continued use of pilot-informed practices after the formal study ended.	Notes that teachers continued referencing and applying trauma-informed tools, suggesting lasting influence on school culture.	SB-L2, reflection on residual effects	1

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
Sustainability	Frames sustainability around integrating trauma-informed thinking into everyday school systems and investing in long-term structures (e.g., clubs, signage, regulation spaces) rather than one-time programs.	Discusses using resources and grants to build enduring practices that support connection and attendance over time.	SB-L2, sustainability discussion	1
COVID-19 Impact	Reflects that prior trauma-informed learning supported the school's response to COVID-19 by extending care to educators and students during heightened stress and disruption.	Describes applying trauma-informed concepts to adult support and organizational responses during the pandemic.	SB-L2, COVID-19 reflection	1
Equity & Context	Connects trauma-informed practice to equity by emphasizing how inequitable systems shape student experiences, arguing that kindness alone is insufficient without structural change.	Explains the need to shift instructional and disciplinary practices that may unintentionally marginalize students.	SB-L2, equity discussion	1
Research & Evaluation	Acknowledges limited engagement with formal study data while noting ongoing monitoring of attendance and behavior through tiered systems and reflective leadership practices.	Mentions reliance on summaries rather than direct review of the final report and focus on local data use.	SB-L2, evaluation discussion	1

Table G6

SB-P Per-Transcript Coding Table

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
Implementation Process	Describes participation as a school-based practitioner embedded in a trauma-informed team using iterative PDSA cycles to test, study, and refine classroom strategies, supported by a grant-funded trauma-informed coordinator.	Explains regular team meetings, use of PDSA cycles, and collaboration with a trauma-informed coordinator to pilot and refine classroom practices.	SB-P, early interview (role & team processes)	1
Knowledge & Frameworks	Frames trauma-informed practice through brain science, adolescent development, and ACEs, emphasizing understanding regulation, stress responses, and how these influence learning and behavior.	Describes learning about adolescent brain science, regulation, and how trauma shapes student engagement and classroom behavior.	SB-P, framework discussion	1
Practices & Strategies	Details concrete classroom strategies including zones of regulation, nonverbal mood check-ins, mindfulness routines, movement breaks, and digitized daily check-ins to support student self-regulation.	References use of zones charts, pulse monitoring during early piloting, mindful minutes, structured breaks, and digital check-in forms.	SB-P, classroom practice examples	1
Outcomes	Perceives improvements in classroom climate and staff capacity to manage behavior without exclusion, alongside reductions in referrals attributed to increased teacher confidence and relational strategies.	Notes decrease in referrals and increased teacher comfort handling behavior through relational and regulatory approaches.	SB-P, reflection on outcomes	1

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
Sustainability	Attributes sustained practices to cultural shifts among staff, peer modeling, and integration of low-cost, routine-based strategies that persist beyond the grant period.	Describes continued use of check-ins, breaks, and regulation routines even after formal funding ended.	SB-P, sustainability reflection	1
COVID-19 Impact	Reports that trauma-informed foundations enabled quicker relational and instructional adaptation during COVID-19, allowing staff to focus on implementation rather than establishing rationale.	Explains how pre-existing trauma-informed understanding supported faster responses to student needs during remote and hybrid learning.	SB-P, COVID-19 reflection	1
Equity & Context	Positions trauma-informed practice as person-centered and relational rather than ideological, arguing its effectiveness through improved attendance, engagement, and student perception of care.	Challenges critiques of trauma-informed work by emphasizing data, student feedback, and equitable access to learning.	SB-P, equity discussion	1
Research & Evaluation	Describes ongoing data use through feedback, referral tracking, and informal student input, emphasizing practitioner-level evidence of impact.	References use of referral data and student feedback to judge effectiveness of strategies.	SB-P, evaluation discussion	1

Table G7

SB-L1 Per-Transcript Coding Table

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
Implementation Process	Frames the TIP pilot as teacher-training centered, describing onboarding into a complex grant architecture with multiple concurrent initiatives. Notes evolution from administrator-driven rollout toward teacher-led leadership and autonomy to adapt strategies to school culture, coupled with regular reporting to researchers and board.	Describes entering in year 2, being brought up to speed on grant intentions, and navigating interconnected initiatives while shifting from admin push to teacher-led restorative work.	SB-L1, early–mid interview	1
Knowledge & Frameworks	Defines trauma-informed practice through brain science and stress regulation, drawing on prior experience with zones of regulation, collaborative problem solving, and MANDT. Emphasizes responding with care without requiring disclosure of student trauma.	Explains that staff do not need students to disclose trauma to respond effectively and highlights prior use of zones, CPS, and de-escalation models.	SB-L1, definition discussion	1
Practices & Strategies	Describes schoolwide structures including advisory, student-led Power Peers SEL lessons, community circles, MTSS-like monitoring, and ongoing coaching conversations to maintain fidelity and avoid re-traumatization.	References advisory hubs, Power Peers, community circles, and difficult coaching conversations with staff to align practice.	SB-L1, practice examples	1
Outcomes	Attributes increased readiness and continuity during COVID-19 to embedded structures and staff mindset shifts, asserting a sustained cultural paradigm around care and relationships.	Notes that existing staff understanding helped weather the pandemic and that the paradigm shift remains despite funding or leadership changes.	SB-L1, outcome reflection	1

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
Sustainability	Identifies deliberate sustainability through bridging partnerships (e.g., University of Oregon) and conversion of the TIP team into a restorative practices team, alongside enduring shared norms.	Describes shifting the TIP team into a restorative practice team to sustain the work beyond the grant.	SB-L1, sustainability discussion	1
COVID-19 Impact	Characterizes COVID-19 as creating a triage period with altered priorities, staff workload changes, and heightened attention to self-care and work-life balance affecting implementation conditions.	Explains how post-COVID triage and staffing realities reshaped focus even as core structures remained.	SB-L1, COVID-19 reflection	1
Equity & Context	Situates TIP within Oregon's policy shift away from exclusionary discipline, highlighting tensions between care and consequence and the need for consistent relational expectations.	Explains that policy now expects keeping students in class and supporting regulation rather than exclusion.	SB-L1, policy context discussion	1
Research & Evaluation	Describes all-staff surveys and quarterly review cycles with researchers, advisory groups, and the board to monitor progress, while noting limited access to post-tenure data.	States surveys were administered to all staff and progress reviewed quarterly with researchers and governance bodies.	SB-L1, evaluation discussion	1

Table G8

ER Per-Transcript Coding Table

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
Implementation Process	Describes the TIP pilot as a cohort-based, train-the-trainer professional learning model assessed through an advisory committee and collaborative ODE–REL partnership.	Explains the intent to use a tight-knit cohort to build champions whose learning would diffuse across the school.	ER, early interview	1
Knowledge & Frameworks	Frames trauma-informed practice through implementation science, adult learning theory, and brain science, emphasizing presence and engagement over punitive control.	Defines TIP as supporting students so they can be fully present and engaged in learning.	ER, definition discussion	1
Practices & Strategies	Emphasizes cohort learning, informal peer facilitation, and reliance on champions rather than uniform, one-time professional development.	Describes the benefit of having local experts who others can consult instead of surface-level training for all.	ER, implementation discussion	1
Outcomes	Notes increased cohort connectivity and awareness, but limits in demonstrating whole-school impact due to design and measurement constraints.	Reflects on difficulty attributing schoolwide change beyond cohort participation.	ER, outcome reflection	1
Sustainability	Identifies limited sustainability planning and lack of institutionalization (policy, PLCs) as barriers to long-term persistence.	Argues practices must be embedded in systems rather than carried informally by individuals.	ER, sustainability critique	1
COVID-19 Impact	Describes COVID-19 as a mediating factor, interacting differently with teacher-led versus administrator-connected models.	Suggests leadership-connected models may have provided more coordinated guidance during pandemic disruption.	ER, COVID-19 reflection	1

Parent Code	Code Description	Example Quotes (Paraphrase or Cite)	Speaker & Location	Participants
Equity & Context	Acknowledges political sensitivity around trauma-informed and equity language, arguing for reframing toward relevance and outcomes.	Notes reduced public use of contested language while maintaining underlying practices.	ER, context discussion	1
Research & Evaluation	Details reliance on surveys and social network analysis, critiquing instrumentation that constrained visibility into organic diffusion.	Explains how limiting SNA prompts reduced insight into broader knowledge spread.	ER, evaluation discussion	1

APPENDIX H

CROSS-ROLE MATRICES AND TIME-ORDERED DISPLAYS

Purpose

This appendix documents the use of cross-role matrices and time-ordered analytic displays as part of the qualitative analysis process. These tools were used to examine patterns across participant roles and to trace changes over time in the implementation and sustainability of the Oregon Trauma-Informed Practices (TIP) Pilot. Matrices were constructed manually by the researcher following code application. The displays supported cross-case synthesis and interpretation but are presented here in summarized form to protect participant confidentiality.

Cross-Role Analytic Comparison

Cross-role matrices were used during analysis to compare how participants positioned at different system levels described implementation, sustainability, and perceived impact of the TIP pilot (see Table H1). Role-based comparison informed the cross-case themes presented in the findings chapter.

Table H1

Cross-Role Analytic Comparison

Analytic Focus	School-Based Leadership	Practitioners	State / External Roles
Implementation emphasis	Professional learning, culture shift, alignment with schoolwide systems.	Classroom-level practices, workload, relational expectations.	Program design, fidelity, evaluation, feasibility of scale.
Sustainability framing	Sustained as staff mindset change and cultural norms.	Constrained by capacity, time, and turnover.	Dependent on institutionalization through policy, structures, and accountability.
COVID-19 effects	Described as triage and disruption of momentum.	Experienced as isolation, burnout, and role overload.	Identified as confounding evaluation and diffusion claims.
Perceived impact	Paradigm shifts and improved relational practices.	Uneven uptake and inconsistent implementation.	Cautious about claims of systemwide impact.

Time-Ordered Analytic Display

Time-ordered displays were used to trace how implementation and sustainability evolved across distinct phases of the pilot and post-pilot period.

- Pre-Pilot / Early Pilot (2016–2017): Cohort-based professional learning and early adopter engagement.
- Mid-Pilot (2017–2019): Expansion of practices, increased teacher leadership, alignment with restorative approaches.
- Pilot Conclusion (2019): Transition from grant-supported activity toward integration with existing initiatives.
- COVID-19 Disruption (2020–2021): Crisis response, remote learning, staff burnout, interruption of diffusion and evaluation.
- Post-Pilot / Post-COVID Context: Partial persistence of relational practices alongside reduced coherence and capacity.

Analytic Use

These matrices and time-ordered displays functioned as analytic scaffolding rather than standalone findings. Insights generated through these tools are presented narratively in Chapter 4.

APPENDIX I

METHODS-LOG EXCERPT

Purpose
This appendix provides a selected excerpt from the researcher's analytic methods log. It documents key analytic decision points illustrating how the qualitative coding framework evolved over time. The excerpt is intended to demonstrate analytic rigor, reflexivity, and transparency rather than to reproduce a complete audit trail.

Initial Coding Phase
Early coding emphasized a wide range of provisional parent categories, including implementation design, barriers, facilitators, trauma-informed knowledge, practices, outcomes, and contextual conditions. This expansiveness was intentional, allowing the analysis to remain open to role-specific meaning-making and variation across participant perspectives.

Analytic Consolidation
Cross-transcript comparison revealed substantial overlap among early parent categories. Distinctions between implementation supports and sustainability conditions emerged as analytically significant. Several practices demonstrated persistence despite the withdrawal of formal pilot structures, prompting a shift from cataloging activities to examining durability, adaptation, and embeddedness.

Reframing of COVID-19
COVID-19 was initially coded as an emergent theme. As analysis progressed, it became clear that the pandemic functioned more effectively as a mediating condition or durability test rather than a discrete outcome. Analytic memos were revised to treat COVID-19 as a contextual stressor that illuminated which practices and frameworks remained resilient under disruption.

Codebook Stabilization
Parent codes were consolidated into eight cross-cutting analytic containers applicable across all transcripts. Sustainability was retained as a central analytic construct rather than a terminal outcome. Once finalized, parent codes were locked, and subsequent analytic work was conducted through child codes and memo-based synthesis rather than further structural revision.

APPENDIX J

DE-IDENTIFIED TRANSCRIPT CITATION METHOD

Purpose

Because this study involves a small, publicly documented pilot initiative and a limited number of participants occupying visible professional roles, special care was taken to protect participant confidentiality and minimize deductive disclosure risk. To accomplish this, all interview transcripts, analytic excerpts, and quotations are cited using a de-identified transcript locator system rather than participant names, pseudonyms, job titles, or site identifiers.

This system allows readers to trace quotations to specific transcripts for analytic transparency while preventing identification of individual participants, schools, or organizations.

Role-Based Identifier System

Each participant was assigned a generalized role identifier reflecting their system-level relationship to the Trauma-Informed Practices (TIP) Pilot Study rather than their formal job title or institutional affiliation. Role identifiers are consistent across all chapters and appendices and were established prior to analytic coding.

The following role abbreviations are used throughout the dissertation:
SB-P – School-based instructional practitioner
IC – School-based implementation participant
SB-L1 / SB-L2 – School-based leadership participants
SPD – State-level policy design participant
ER – External research and evaluation participant
CO-P – Community organization participant
CO-A – Intermediary organization advisory participant

Transcript Locator Format

All interview quotations are cited parenthetically using a three-part transcript locator:
(Role Identifier, transcript page number, line number range)
Format Example:
(Role abbreviation, p. X, lines Y–Z)
Sample Citations:
(SB-P, p. 3, lines 72–74)
(SB-L2, p. 6, lines 175–181)
(CO-A, p. 11, lines 300–305)
(SPD, p. 5, lines 130–137)

Transcript Preparation and Numbering
All interview transcripts were transcribed verbatim, fully de-identified prior to analysis, and assigned continuous page and line numbering beginning at page one for each transcript. Page and line numbers refer to the original de-identified transcript files, not to compiled analytic documents or excerpted tables. This structure supports analytic traceability while preserving confidentiality.

Confidentiality Protections
Several safeguards were implemented to prevent deductive disclosure:
• No participant names or pseudonyms are used.
• No school, district, or organizational names appear in transcripts or citations.
• Temporal details, employment histories, and unique professional identifiers were removed or generalized.
• Role identifiers intentionally group participants at a functional level to avoid one-to-one identification.

Because certain roles were held by a very small number of individuals during the pilot period, generalized descriptors were used intentionally to protect identity.

Analytic Transparency and Rigor
This citation method balances ethical responsibility with analytic rigor by enabling clear attribution of quotations to role-based perspectives, supporting cross-role comparison, maintaining traceability to original transcripts, and preserving a complete audit trail. This approach aligns with established qualitative research standards for small-sample, high-visibility studies.

Relationship to Other Appendices
This transcript citation method is used consistently across Chapter IV (Results), Appendix K (Cross-Role Thematic Analysis), coding tables, analytic matrices, and the methods log. An anonymized role crosswalk is maintained securely and is not included in the dissertation to preserve confidentiality.

APPENDIX K

TIP DISSERTATION CROSS-CASE THEMATIC ANALYSIS

Purpose and Unit of Analysis

This appendix presents a cross-role thematic analysis examining participants lived experiences and role-based sensemaking related to the implementation, evolution, and durability of trauma-informed practices following Oregon's 2016 to 2019 Trauma-Informed Practices Pilot Study.

The unit of analysis is participant reflection across roles rather than program fidelity, prevalence, or institutional effectiveness. This appendix consolidates findings from prior analytic phases rather than introducing new analysis.

The themes presented below represent cross-role analytic patterns derived through iterative coding, comparison and synthesis across participant account.

This analysis is best understood as a retrospective, cross-temporal qualitative analysis grounded in time-spanning participant reflection and post-pilot sensemaking across phases, including pilot implementation, post-pilot transition, and the COVID-19 pandemic. It does not constitute a longitudinal research design.

Participants are referenced exclusively through generalized role descriptors to preserve confidentiality within a small, publicly documented initiative.

Participant Roles

The final analytic sample included eight participants representing the following roles:
School-based instructional practitioner (SB-P, n = 1)
School-based implementation participant (IC, n = 1)
School-based leadership participants (SB-L1 and SB-L2, n = 2)
State-level policy participant (SPD, n = 1)
External research participant (ER, n = 1)
Community organization participant (CO-P, n = 1)
Intermediary organization participant (CO-A, n = 1)

Guiding Analytic Questions

What conditions allowed trauma-informed practices to persist once formal pilot structures ended?
Which practices proved durable under systemic disruption?
What was lost, adapted, or abandoned after external supports were withdrawn?
The following themes synthesize cross-role patterns in the persistence, adaptation, and decline of trauma-informed practices across roles and time.

Theme 1: Simple, Low-Cost, Values-Aligned Practices Persisted
Across roles, participants described sustained trauma-informed practices as those that were simple to enact, required minimal resources, and aligned with existing professional values. Predictable opening routines, community circles, brief private check-ins, and low-stakes formative assessment were described as durable and recognizable as good teaching practice (SB-P, IC, SB-L1, SB-L2, SPD). Participants noted that brain-science framing emphasizing regulation, predictability, and psychological safety reduced resistance across staff roles (SB-L1, SB-L2, CO-A). The community organization participant reinforced that a strength-based, do-no-harm stance embedded into everyday interactions was more sustainable than isolated programming efforts (CO-P).

Theme 2: Resource-Dependent Components Declined After Funding Ended
Participants across leadership, policy, and research roles described grant-funded coordination roles, intensive professional development cycles, and specialty student spaces as vulnerable following the conclusion of pilot funding (SB-L1, SB-L2, SPD, ER). Where selected components persisted, leaders described introducing time limits, access protocols, and instructional re-entry expectations to reduce avoidance and support student endurance (SB-L2). The intermediary organization participant identified these patterns as typical of pilot-only designs and emphasized the importance of pairing centralized professional learning with targeted mini-grants to support local diffusion and sustainment (CO-A).

Theme 3: Shift from Formal Structures to Peer-Supported Systems
Participants consistently described a shift away from administrator- or coordinator-led implementation toward peer-supported and teacher-led systems. These included restorative teams, collaborative problem-solving groups, and advisory routines embedded into the school day (IC, SB-L1). Small practice kernels tied to authentic classroom challenges were viewed as more effective for diffusion than formal trainings (CO-A). State-level policy experience illustrated how adult-focused learning created portable capacity that carried across leadership contexts, reinforcing the importance of internalized knowledge rather than role-bound expertise (SPD).

Theme 4: COVID-19 as a Test of Practice Durability
Participants described the COVID-19 pandemic as a naturalistic stress test revealing which trauma-informed practices had become embedded. Where trauma-informed mindsets were already integrated, schools adapted more quickly and coherently to remote and hybrid learning environments (SB-L1, SPD). Durable elements included advisory hubs, community-building routines, student leadership structures, and adult-care framing for staff (SB-L2, CO-P). Participants also described unmet hopes for broader systems change and renewed fragility when temporary relief funding ended (CO-P, CO-A).

Theme 5: Sustainability Conditions Differed from Implementation Conditions
Participants distinguished between factors supporting initial implementation and those enabling long-term sustainment. Implementation relied on formal roles, training schedules, logic models, and reporting requirements (SPD, ER, SB-L1). Sustainability depended instead on simplicity, institutional embedding, distributed leadership, and family-facing structures such as volunteer networks and parent organizations (SB-L2, SB-L1, CO-P). This distinction clarified why some

practices faded despite successful initial rollout, while others persisted and evolved beyond the pilot period.

Cross-Cutting Equity and Language Considerations

Participants noted shifts in Oregon's equity discourse over time and cautioned against trauma-informed frameworks that fail to address systemic inequities. Several described strategic use of brain-science language to navigate political constraints while maintaining equity-aligned intent (SB-L1, CO-A). The community organization participant described language shifts, such as reframing perceived defiance as resourcefulness, as mechanisms for sustaining strength-based practice under constraint (CO-P).

Synthesis and Implications

Across roles, participants identified short, values-aligned routines and embedded cultural practices as the most durable elements of trauma-informed work. Over time, initiatives shifted from formal programs to everyday norms, coordinator dependence decreased, and intensive professional development condensed into coaching and informal diffusion. Findings from this cross-role thematic analysis suggest future trauma-informed initiatives should prioritize simplicity, institutional embedding, distributed leadership, adult-care normalization, equity-aware language, and funding models that extend beyond pilot timelines.

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