

TRANSFORMING PSYCHE SYSTEMS THEORY: A GROUNDED THEORY
OF TRANSFORMATIVE TEACHING WITHIN INTERCONNECTED
SYSTEMS

by

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CERTIFICATE OF APPROVAL

I certify that I have read TRANSFORMING PSYCHE SYSTEMS THEORY: A GROUNDED THEORY OF TRANSFORMATIVE TEACHING WITHIN INTERCONNECTED SYSTEMS by Holly Elizabeth Adler, and that in my opinion this work meets the criteria for approving a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in East West Psychologies at the California Institute of Integral Studies.

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ABSTRACT

The psychology of transformation has long been a curiosity, rooted in the spiritual concept of self-transcendence. Transformative teaching has remained mysterious in adolescent pedagogy but the complex global climate calls for worldviews that can grow and evolve as fast as our human and planetary systems. This paper presents the empirical foundation for transformative psyche systems theory—a new theory for understanding transformative teaching and a vision for what it looks like. San Francisco Unified School District (SFUSD) credentialed employees nominated their colleagues that they believed have been successful in transforming limiting learning-related worldviews held by their adolescent students. Using a social constructionist grounded theory methodology, 30 nominees from 10 middle and high schools were interviewed to determine how processes of transformative teaching fit together, and to identify the various systems and variables engaged with in facilitating reconstruction of meaning for worldview transformation. This dissertation describes the major theoretical themes of transformative teaching systems, included relational solidarity, attunement and entrainment, facilitative real modeling, and context management on the classroom and school-wide levels. The systems schematic visual models

are introduced to offer a conceptual image of the rhythmic interconnectedness within transformative teaching and define nested systems dynamics impacting worldview transformations. The discussion integrates practical skills and tools from liberation and somatic counseling psychologies with pedagogy of rhythmanalysis, guided by the analogy of transformative teaching as jazz.

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DEDICATION

With love, for those who do not yet see a better tomorrow

It's frequently easier to spot outer constrictions than inner ones. We can be so very close to the beliefs underpinning our self-image that we have zero objectivity towards them, making it impossible to see ourselves as anything other than who we think we are. This blind spot is the source of our greatest limitation, for if we cannot perceive where we limit ourselves we become our own jailer. We can defy the restricting expectations of the outside world all we want, but if we cannot do the same within we are forever bound.

– Sarah Varcas (personal communication, November 2, 2015)

TABLE OF CONTENTS

Abstract.....	iv
Acknowledgements.....	vi
Dedication.....	vii
List of Figures.....	xiv
Preface.....	1
Chapter 1: Introduction.....	3
Transcendence, Transformation, Self-Actualization.....	4
Worldview Cultivation.....	8
Worldview Transformation.....	10
Living in a Changing San Francisco.....	15
Gentrification and Displacement.....	18
Sociopolitical Systemic Climate.....	20
The Schools in This Study.....	27
Chapter 2: Literature Review.....	29
Limiting Learning-Related Worldviews.....	31
Transformative Teaching.....	34
Definition of Transformative Experiences.....	41
Nonlinear Model for Developing Social Consciousness.....	45
Ethical Considerations.....	47
Transformative Teachers Model Transformation.....	49
Authenticity in Transformative Teaching.....	50
A Call for a Model for Instruction in Transformative Teaching.....	53
Researchers Began to Formulate a Model for Instruction of Transformative Teaching.....	54

Training Transformative Teachers	56
WVEP Process and Findings.....	58
Chapter 3: Research Methods	62
Social Systems Complexity Theory	62
Construction Theory.....	67
Transpersonal Theory.....	69
Critical Theory	71
Goal of Study	75
Consideration of Method: Grounded Theory	77
Operational Definitions for Recruitment.....	78
Research Proposal Approval Process Through SFUSD.....	79
Screening Procedures	80
Inclusion and Exclusion Criteria for Participation	81
Recruitment Protocol.....	82
Data Collection Procedure	85
Interviews	85
Participants	86
Demographics.....	87
Researcher as Participant through Insider Status	88
Handling of Data	89
Analysis of Data	90
Coding Interviews.....	92
Developing Categories.....	93
Data Quality Evaluation	94
Chapter 4: Research Findings	101

The Concept of Transformation	103
Themes and Categories	109
Relationship Systems—Theme: Relational Solidarity	110
Motivations.	111
Behaviors.	113
Perceptions.	123
Stance.	129
Valuation.	134
Real-World Systems—Theme: Attunement and Entrainment	138
Forced entrainment: Racism.	139
Forced entrainment: Oppression.	150
Attuning to learners’ positionality.	156
Cocreative social reconstruction.	168
Empowerment through voice.	174
Teaching Systems—Theme: Facilitative Real Model	182
Facilitative real modeling.....	183
Roles of the facilitator.....	189
Ways to facilitate.	196
Reflexive and responsive.	202
Classroom Systems—Theme: Context Management	206
Relational container.	206
Creating culture.....	215
Positive directionality.	219
Spiraling process.....	223
Learning feedback loops.	226

School-Wide Systems—Theme: Context Management	231
Systemic attunement toward solidarity.	232
Social systems reconstruction.	241
Mediating systemic pressures.	246
Chapter 5: Theoretical Model	252
Overview of Transforming Psyche Systems Theory (TPST).....	253
TPST Visual Models	259
Relationship systems- model: relational solidarity.....	261
Real-world systems- model: attunement and entrainment.....	262
Teaching systems- model: Facilitative real model.	264
Classroom systems-model: Context management.	265
School-wide systems-model: Context management.....	266
Chapter 6: Discussion	268
Transformative Teaching as Jazz	269
Jazz is Distinctly Different.....	277
Liberation Psychology.....	280
Resistance Becomes Creativity	282
Solidarity	284
Interconnectivity Through Systemic Transformation Points	286
Liberation is Jazz.....	290
Facilitative Real Modeling	291
Rhythm Entrainment Through Psycho-Social Interconnectivity	294
Sense-Making Through Rhythmic Attunement	299
Working With the Rhythms of the Psyche.....	300
Classroom as a Rhythmic Ecology.....	302

Don't Break Their Spirit, Cultivate It	304
Fostering Transformation Points	306
Facilitating as Rhythmanalysis.....	307
Rhythmic Dissonance.....	309
Developing Epistemic Cognition	311
Rhythms of Emancipatory Education	314
Alienation	317
Possible Future Research	318
Limitations and Delimitations	321
Fulfilling SFUSD Requirements	326
Concluding Thoughts	327
References.....	334
Appendix A: Research Approval, SFUSD.....	345
Appendix B: Recruiting Flyer.....	346
Appendix C: Executive Summary of Research Proposal for Recruiting.....	348
Appendix D: Operational Definition of Worldview	351
Appendix E: Image of Online Form for Collecting Nominations	353
Appendix F: Sample Initial Contact Communication.....	356
Appendix G: Informed Consent Form	358
Appendix H: Confidentiality Agreement.....	363
Appendix I: SemiStructured Interview Protocol.....	365
Appendix J: Photo of Note Taking	368
Appendix K: Photo of Interviews with Codes/Notes.....	369
Appendix L: Photo of Code Sheets.....	370
Appendix M: Photos of Collapsing Codes Sheets	371

Appendix N: Photo of Developing Categories	373
Appendix O: Photo of Codes/Categories Broken Down into Themes	375

LIST OF FIGURES

Figure 1. Theory of Transformative Systems Rhythmanalysis.. .. .	260
Figure 2. Relationship Systems—Theme: Relational Solidarity.. .. .	261
Figure 3. Real-World Systems—Theme: Attunement and Entrainment.. .. .	263
Figure 4. Teaching Systems—Theme: Facilitative Real Model.....	264
Figure 5. Classroom Systems—Theme: Context Management.....	266
Figure 6. School-Wide Systems—Theme: Context Management.....	267

PREFACE

We are going to emancipate ourselves from mental slavery because whilst others might free the body, none but ourselves can free the mind. Mind is your only ruler, sovereign. The man who is not able to develop and use his mind is bound to be the slave of the other man who uses his mind.

– Marcus Garvey (as cited in Azikiwe, 2013, p. 21)

Having worked with students in the classroom since 2006 and receiving my teaching credentials as a resource specialist through an undergraduate program (Spring, 2009), there were a number of unique teaching and learning experiences that led to beginning a doctoral program in the fall of 2013. Primarily, my first full-time teaching experience (Fall, 2009) was in an all-Black and notoriously fierce Philadelphia public high school, Martin Luther King Jr., on Stenton Avenue. This school had made the persistently dangerous schools list the previous year (Pennsylvania Department of Education, 2019), and would soon be closed due to socioeconomic politics and the resulting inability to address the widespread inequity and violence. I was simultaneously shocked at and devastated by the poor conditions and low quality of education made available to these students, while in awe at the joy and curiosity of these amazing young people. They were inspired and excited about life—despite not having the overly privileged, White, New York, boarding school, sparkling-white-pony-under-the-Christmas-tree life that I had. I became driven to understand those mysterious teachers who create learning that feels like magic is actually happening in the classroom—and the students who flourish despite the odds of systemic oppression being stacked against them.

In the spring of 2014, I had begun working as substitute teacher for San Francisco Unified School District (SFUSD). In the fall of 2014, I had accepted a

resource specialist position for SFUSD, in a kindergarten-through-fifth grade bilingual, dual immersion program with pathways of Spanish-English, Chinese-English, or English only. The following year, while finalizing and submitting the proposal for this research, I filled a resource specialist role at a smaller, fully Spanish–English dual immersion kindergarten-through-fifth grade school. The proposal for this project was fully approved in the spring of 2016. During the recruiting, data collection, and analysis processes of this project, I spent two school years (2016–2018) as a resource specialist at a large SFUSD high school in the southeast corner of the city. I declined to continue teaching the following school year (2018–2019) because I was unable to complete this project while devoting myself appropriately to my students. With each of my past teaching experiences, the dynamic was unique, brought a different set of challenges, and highlighted new aspects that matter in teaching. I look forward to continuing this work for years to come and I am forever grateful to have had such an opportunity to understand the depth of my personal privilege and the quality of life that extreme privilege has afforded me.

A note of departure from the writing style of my academic institution: empirical research by LaScotte (2016) and Noll, Lowry, and Bryant (2018) demonstrated, “they” is the appropriate term to facilitate processing potentially feminine nouns that are nongender specific, whereas “he” is actually prohibitive. Thus, in alignment with a critical stance supporting the use of nonbinary gendered language, throughout this document the epicene pronoun *they* is used as the singular pronoun in sentences where the gender of the subject is unspecified.

CHAPTER 1: INTRODUCTION

As an elementary school resource specialist, the day was spent “pushing in” to various classrooms to work with students who have unique learning needs and challenges. A teacher in one of the classrooms that I visited frequently was a master teacher. She did an excellent job of modeling how to transform oneself as a learner while engaging in reading and writing. The master teacher behaved in the way that she expected her students to, while giving requests for specific responses and demonstrating the process they were expected to go through in order to respond. She communicated in the same tone and level of respect that she expected of students: she embodied the expectations that she held for her students. She apologized sincerely if she gave an unclear or inaccurate instruction, then she gave the instruction correctly. This class continued to grow and develop into a more cohesive and functioning fertile ground for learning, with engaged and proactively participating students.

In another classroom next door, a new teacher with the same demographic set of students struggled every day to get through even the most carefully planned lessons—while also undergoing an in-depth coaching cycle with the school’s literacy specialist. The new teacher had trouble modeling the very processes and behaviors the students are expected to perform. She appeared unclear how to teach the lessons, and seemed to spend much time wondering what to do. The students had trouble engaging in the lesson, did not understand what they were supposed to be doing, were often left with unanswered questions, and had no enforced behavioral expectations during different types of tasks. The students

were bored and had no idea what was going on so they paid less and less attention, often drawing comics or playing games without protest from the teacher. This classroom fell further behind in the curriculum each day.

The literacy specialist was not sure how to support the struggling teacher in becoming more like the master teacher; for some reason the new teacher was just is not getting it. The difference in student learning between the two classrooms was apparent in work produced by the students, by their ability to communicate about ideas, and through the depth or clarity of the ideas themselves. However, it is interesting to see that when the literacy specialist or the master teacher stepped in to model the correct teaching style and techniques for the new teacher, the students often instantly transformed into what appeared to be a wholly different class. Although this is a common issue that plagues some new teachers, veteran teachers may equally struggle in a similar way at various points in their careers. Having the opportunity to observe the three individuals' teaching styles and the very different ways they worked with the same curriculum, set of students, and basically the very same situation, highlighted the effectiveness of the master teacher and the literacy specialist.

Transcendence, Transformation, Self-Actualization

In order to address such classroom management issues, teachers need to understand the complexity of what contributes to this situation and develop pedagogy to confront these issues in their everyday work. Within reason, it could be possible that a teacher may need to be able to apply these same principles in their own lives in order to be able to model and teach them effectively. Adult

transformative learning theorists Taylor and Elias (2012) defined the concept of self-transforming as being “successful at negotiating across boundaries” (p. 158) while simultaneously recognizing that “these boundaries are self-constructed” (p. 158). The self-transformers’ ability to perceive boundaries as self-constructed allows them to re-evaluate and reframe the constructed boundaries, therefore transcending limitations of and inviting engagement with what was previously outside of the socially constructed boundaries. A self-transformer chooses to transform on purpose. Taylor and Elias posited that it is probable an individual can learn the skills of self-transforming as a way to transcend self- or socially-imposed limiting learning-related attitudes, beliefs, and values, or worldviews.

Daniels (2001) conducted a thorough analysis of the way the concept of transcendence is discussed in transpersonal psychology literature, finding that the term *transcendence* refers to the lived phenomenological experience of overcoming limitations of the ego-self to reach a state of greater wholeness and completeness. This process aims to reach a deeper or higher understanding of the self, which is different than claims made about the existence of a transcendent, spiritual, godlike plane of existence or state of being. He explained that the “notion of transformation, or of transcendence in the broad sense, makes no assumptions whatsoever about the metaphysical existence of a spiritual or transcendental reality” (p. 13). Daniels equated self-transcendence with the process of transformation; he did describe practices and circumstances through which transformation may be facilitated or that contribute to becoming

transformed, however, he neglected to explicitly define transformation as a phenomenological process.

Teixeira (2008) explained that self-transcendence is an inherent quality in every human being that leads toward personal transformation, which is instrumental to finding purpose in life. Teixeira points to the idea that it is a natural part of human development and evolution to evaluate what constructs of self are useful, and to consciously or unconsciously leave behind constructs of self that are no longer useful or have become self-imposed limitations. This re-evaluation reflexively results in changed behavior and recognizing different ways to interact between self and the world. Frankl (1966) argued that self-transcendence is the very essence of existence, in that desire to transcend the currently authentic self is the motivating force behind continued self-actualization.

Maslow (1970) characterized the process of self-actualization as the individual becoming more capable of love and a continuing “obliteration of the ego boundaries” (p. 166). He explained that the individual is more motivated by the desire for growth, as opposed to motivation from feelings of inadequacy or deficiency. More recently, Dweck (2006) outlined empirical data compiled from her life’s work that defined the drive toward continued self-actualization as having a growth mindset, opposed to having a fixed mindset. This growth-oriented mindset could potentially be a significant component of developing into a self-transformer.

Before being able to determine what contributes to an individual becoming a self-transformer, it must first be understood what transformation actually is. For the purposes of this proposed research, Schlitz, Vieten, and Amorok's (2008) process-oriented definition of transformation is adopted. Schlitz et al. defined the phenomenon of transformation as a process through which a person's life is "changed for the better in profound and long lasting ways" (p. 200), although subjectively so. Transformation occurs in a similar process regardless of a person's belief system or ideology. It is full of paradox because it can be the result of shock, pain, contraction, or suffering but also wonderment, relief, awakening, and joy. Transformation is an undeniable shift in a person's perspective on their self, life, and the world in which they live. The shift may begin as a brief glimpse through a new perspective or an epiphany that brings murky, confusing ideas into undeniable and sudden clarity. These shifts can be initiated by a wide variety of catalysts that alter the state of affairs in the person's life. Transformative moments are "a recognition of some undeniable truth that flies in the face of—or puts the lie to—some fundamental belief [one has] held, possibly without even knowing it" (p. 203). In some instances, transformation can be small, subtle-seeming shifts in surface beliefs, values, and assumptions that manifest through hardly noticeable changes in the way the individual makes meaning; these more-subtle transformations can accrue over time to result in greater shifts. Transformation can also be deep underlying structural changes in the individual's meaning-making system, including one's epistemic and ontological understanding of the

world and one's own role in it, prompting an entirely new way of living in and interacting with the world.

Worldview Cultivation

There is a need for addressing fundamental beliefs, attitudes, and values that either foster or impede learning and student growth, as evident in the classrooms described above. Scholars and researchers in the field of education report that the need for cultivating healthy worldviews related to learning and self-development is becoming increasingly significant in adolescent education (Cranton & Carusetta, 2004; Mezirow, 2000; Roeser, Strobel, & Quihuis, 2002; Schlitz et al., 2011; Slavich & Zimbardo, 2012). Roeser, Stroebel, and Quihuis (2002) determined that it is not merely a cognitive ability that is impacting student learning and future success, but the students' less-than-academically-efficacious worldviews. Worldview is comprised of beliefs, values, and assumptions, which positively, negatively, or neutrally impact an individual's learning and development (Schlitz et al., 2011).

The cultivation of healthy learning-related worldviews has become so highly significant on the global level that the U.S. Council on Foreign Relations has issued a report outlining concerns regarding the dwindling national capacity to maintain a competitive edge in the global marketplace (Klein, Rice, & Levy, 2012). This report declared that, due to the lack of education preparing students for becoming adult citizens capable of participating in a global economy and society, the U.S. education system is a threat to national security. Criticisms of the findings included in the report stated that "while some of the data are disturbing,

nothing in this report convinces me that that our public schools ‘constitute a very grave national security threat facing this country’” (p. 60). Regardless of the validity of the report, the authors used their conclusions to endorse institution of the Common Core Standards, which are a set of federally mandated learning standards all U.S. students must meet during the course of their compulsory education. The Common Core Standards require that teachers cultivate students’ healthy learning-related worldviews so they are able to understand, effectively communicate, and collaborate with people from varied social groups that hold different worldviews (Common Core State Standards Initiative, 2010). The U.S. federal government considers it an imperative in the global socioeconomic and ecological system for individuals to be able to negotiate across boundaries delineated by the wide diversity of worldviews that exist internationally.

Thus, in effort to develop an empirical model that addresses the need for cultivating healthy worldviews related to learning, self-development, and cross-cultural communication, this study investigated how classroom teachers model positive transformations in worldview during their everyday instruction and classroom management. Hypothetically, classroom teachers must already be fostering worldview transformation in their adolescent students to at least some degree. This specific aspect of the teacher–student relationship in transformative education appeared to be some sort of leverage point in the learning dynamic that could potentially make or break the systems in place in the classroom, as discussed anecdotally above.

In this study, teachers and credentialed employees of SFUSD were interviewed about the processes facilitated by the teacher in the classroom that cultivate self-efficacious learning-related worldviews in students. The objective of the research was to develop a midlevel grounded theory (Charmaz, 2014) to provide a model for adolescent transformative teaching and learning that can be adopted by teachers and schools across a wide array of districts. The research method was chosen in alignment with Mertens's (2010) discussion of grounded theory as the most applicable method for closing the gap between theory and practice in education research. Charmaz's (2014) social constructionist grounded theory approach was applied because worldview transformation is a concept that is fundamentally rooted in social constructionism.

Worldview Transformation

At the outset of this project in 2013, the problem seemed simple and clear: figure out what transformative teaching looks like, and how to teach in that way. This idea was developed from questions remaining after developing the literature review. It was unclear what was still needed in order to understand the processes and systems of transformative teaching. The following questions were developed for the guiding boundaries of this grounded theory study:

- What does transformative teaching look like, as it is already happening in SFUSD classrooms?
- How do classroom teachers facilitate the transformative process in their adolescent students on an everyday basis?

- What does the exchange between the teacher and student(s) look like, sound like, or feel like?
- What does the teacher do to nurture motivation to authentically engage in learning?
- How does the teacher model critical self-reflection?

This research was inspired by personal experiences as a teacher, and everyday teaching circumstances continued to bring fresh perspective to the development of this research through its entire course.

In order to address this complex issue, Slavich and Zimbardo (2012) proposed that classroom teachers, with students of all ages, need a way to understand what the transformative teacher is doing to teach and model for the students how to transform as learners. Although the initial proposal of this study did not intend to limit the age of students that participants taught, no elementary schools participated in the study. All of the schools that participated in this research were SFUSD middle and high schools spanning grades 6-12, mostly in the southeast quarter of San Francisco. Not only is the southeast the most racially and economically divided corner of the city, these schools are a considerably more complex setting than the elementary classrooms described above to initially define the problem. Despite the obvious fact that these same issues occur in teaching across all ages, the issues seem to become compounded with time and more glaringly obvious with age. As individuals' intellect develops, their worldviews and meaning-making become more intricate and multifaceted.

Regardless of the age of the students, teachers need to understand what is happening and need pedagogy to confront these issues in their everyday work.

Villegas and Lucas (2002) explained that worldview is not a universal construct, but socially constructed and “profoundly shaped” (p. 27) by each individual’s life experience, affected by a variety of influences. Therefore, each individual’s worldview is a unique, yet flexible position on a global continuum of perspectives and perceptions: an interconnected web affected by culture, geographic position, socioeconomics, health, belief systems, philosophies, guardianship, somatic phenomena, education, developmental level, and states of consciousness, as well as many other factors. Each individual’s distinctive positionality and perspective is relative to, affected by, and in relationship with what other individuals perceive as their own positionality within the interconnected web that makes up the global system of all individuals and their worldviews. A worldview can be interpreted as a blueprint or the structure an individual references to make meaning from experiences (Naugle, 2002). Worldview structures can be imagined as a homebuilder who uses modular designs: many houses in the same community can have identical components because they used sections of the same blueprints combined to make a unique floor plan. Awareness of this structure makes it possible to compare one’s blueprint or worldview to another set or organization. Kreber (2012) clarified that critical theory, critical reflection, and social constructionism inherently link through processes of evaluating broad ideological cannons, or commonly held worldviews, which can be socially constructed and unconsciously accepted. These

unconsciously accepted worldviews become operating modalities that affect personality development and character. Wade's (1996) work shows that some components of worldview are variables to state of consciousness, such as concepts of time, ability to foresee cause and effect, understanding of power dynamics, and beliefs about relationships with others.

Lincoln and Guba (2013) explained that a worldview is a socially constructed interface that mediates between reality, the individual's experience of reality, and the individual's understanding of what their reality actually is. This interfacing capacity aids the individual in making meaning and understanding how one has made meaning out of all the many bits of information that came together to form a worldview from the experience of one's reality. Worldview encompasses self-view, and the two concepts reflexively affect each other: as one changes so inextricably does the other because the relationship between the individual self and the outside world has shifted, although in some cases the shift may be subconscious (Schlitz et al., 2008; Schlitz, Vieten, & Miller, 2010). An understanding of one's own self-view and worldview develops reflexively through critical self-reflection (Villegas & Lucas, 2002).

Transformative teaching is a field that addresses the challenges classroom teachers face in the cultivation of students' self-efficacious learning-related worldviews (Slavich & Zimbardo, 2012). Transformative teaching inadvertently fulfills the requests of the Common Core Standards by providing a framework for beginning to understand how to address and foster changes in a student's limiting learning-related worldviews. Transformative learning is related to the experience

of the student, while transformative teaching is related to the experience of the teacher; together these form the field of transformative education. Newman (2011) made the argument that transformative teaching is actually just a composite of what he identified as tenets of good teaching, and proposed that no separation should be made between good teaching and transformative teaching. Regardless, this position neglects to consider the fact that some good teaching is undoubtedly just not transformative for all learners. Slavich and Zimbardo (2012) conducted a broad review to synthesize related empirical studies and theoretical literature, determining that a variety of the best practices and instructional principles utilized in pedagogy are inherently transformational, but not all.

Regardless of where the lines are between good teaching and transformative teaching, Schlitz et al. (2008) and Schlitz, Vieten, and Miller (2010) defined transformative experiences as phenomena that foster fundamental shifts in worldviews by bringing awareness to the limiting beliefs, values, and assumptions that are preventing growth and improved conceptualization. Schlitz et al. (2010) explained that continued transformation can be catalyzed through the development of an introspective practice of learning to become more conscious of the structure, organization, and schematic composition of one's own worldview. This definition of worldview transformation brings Newman's (2011) argument into conjunction with Slavich and Zimbardo's (2012) findings that good teaching fosters transformations in, and increasing consciousness of, one's own worldview. While Mezirow (1978a, 1978b) is considered the seminal authority on adult transformative learning theory and provides a 10-phase model explaining

transformation in the context of adult learning, the above definition developed through the research of Schlitz et al. (2008, 2010) is adhered to because their work accepts the premise that both adolescent and adult populations have the capacity to engage in psychological transformation, while Mezirow's work is specifically related to adult learning. The major question raised by comparing these two perspectives is whether or not an individual that is considered an adolescent has the capacity to engage in psychological transformation. This question is explored in the literature review, and addressed further in Chapter 6: Discussion.

Living in a Changing San Francisco

In completing this research it became apparent that understanding the San Francisco Bay Area sociopolitical and economic environment would be essential to contextualizing the difficulties faced by teachers and students in SFUSD, and their resulting worldviews. San Francisco is an international city at an epicenter of the United States' knowledge-based economy. When a person calls city information lines, options are offered in Chinese (Cantonese), Spanish, or English. When San Francisco comes to mind, one may think of a history represented by images of hippies using marijuana and LSD. Perhaps people imagine the Black Panther organization's refusing to back down against blatant racism and systemic social violence. Or maybe, a person initially thinks of a place where LGBTQ individuals first gained rights and social acceptance. In the past 15 years or so, people may think of Silicon Valley, the technological revolution, and its subsequent wealth. Regardless of the uprising culture, San Francisco has

continuously rebranded itself as a forward-thinking city of progress, socially led change, intellectual revolution, and innovation.

San Francisco has historically been an international city where Eastern cultures met Western cultures, where North meets South. It is a place where the psychologies of people from distinctive corners of the globe come together to function as a dynamic social system where people revel in, love, and even hunt down the weirdness of psychosocial intersectionality that has historically come alive in the Bay Area. The multidimensionality of worldviews in the San Francisco Bay Area comes from a rich diversity of cultures colliding from all over the world: this is not a stereotypical U.S. city.

Researching public schools in this city called for an approach to seeing and making visible the underlying structures of the city's psychology that are embedded in its communities, hidden deeply underneath the wide variety of cultural and social norms—some of which are pathologized by mainstream psychologies. To understand people in a place like this, a psychology made for seeing outside, inside, around, and through the box was needed. San Francisco is a city at a crossroads where diverse international psychologies come together in one working social system. It is a city where people love to let their freak flags fly, honor their heritage, and create unthinkable possibilities. San Francisco is a place where people have come to believe fitting into a box of the social norm is undesirable.

While other cities, such as New York and Miami, do deserve recognition for their nature of dynamic social intersectionality, the Bay Area is also quite a

unique place to experience. As the cities that make up the Bay Area become more economically divided, the development of a modern U.S. caste system through new Jim Crow laws (Alexander, 2012; Anderson, 2017), has been trying to take a deeper hold in a West Coast metropolis that has historically refused to conform to social norms.

After growing up in the massive East Coast metropolis that is New York City, with a population of over 8 million, San Francisco felt small in comparison to knowing what it is like to live in a gigantic city. It was initially a concern that conducting a study of this small sample size, with San Francisco as the 13th largest city by population even though it is the second by density (World Population Review, 2018), I was initially concerned that the findings might not be able to provide a clear picture of what may be possible across the broader field of education and social systems. Although the issues plaguing San Francisco may seem unique compared to cities of similar social systems complexity, the hope has been, throughout this entire research endeavor, that this deeper analysis of this relatively bounded data set shows that a lot can be learned from this seemingly small study. By studying teaching from an integral transpersonal perspective that takes into account the unique psychologies of individuals from Eastern, Western, Indigenous, South American, and African cultures, the systematic patterns of cultural clash and social oppression was able to become quite apparent, as is demonstrated by the presentation of the findings and discussion.

The way that students experience living in San Francisco matters to how the participants organized their teaching and engaged with their students. Each

city has sociopolitical and economic trends that change the landscape of the neighborhoods over time. These environmental pressures shape how individuals socially construct their worldviews, based on their experiences in that landscape. At the time of this study, a major issue facing all students, teachers, and employees of SFUSD, in one way or another, was the skyrocketing prices of the housing market. The following discussion of gentrification issues is needed to contextualize findings and discussion of this study within the sociopolitical economic climate of the time leading up to recruiting and while interviews were being conducted.

Gentrification and Displacement

Regardless of a family's background, providing an appropriately sized house for that family is no small task in a city with outrageous housing costs. In San Francisco a family of four living on less than a combined income of \$117,400 annually is considered low income by the U.S. Department of Housing and Urban Development (2018). Zuk et al. (2015) conducted a research study, funded by the U.S. Department of Housing and Urban Development, which explored the relationship between gentrification and displacement in the San Francisco Bay area. Zuk et al. identified that one out of four of the 7 million residents in the Bay Area's nine counties are considered "severely housing burdened" (p. 3) according to standards set by the Department of Housing and Urban Development. Zuk et al.'s research means that 1.75 million residents spend over one half of their income to pay for housing. Over one-third of the region's workforce makes less than \$18 per hour, but meanwhile, in order to afford a two-bedroom apartment in

four of the Bay Area counties, these individuals would need to have 4.7 full-time jobs (p. 4). This bleak housing situation makes it an impossible task to afford a two-bedroom apartment with only one working parent for at least an entire third of the Bay Area's population. Zuk et al. wanted to understand the impact of public investments, like improving mass transit, on gentrification and displacement.

Over the course of one year, Zuk et al. (2015) conducted nine case studies of Bay Area neighborhoods, through mixed-methods community engaged research. They made field observations, held interviews, and quantitatively analyzed data about the neighborhoods to better define the process of change and the pressures experienced by residents in neighborhoods of gentrification. Their research showed that displacement and gentrification are more accurately understood when viewing the entire region as a system of communities changing over time. They found that the complex, multistage change process is driven as a result of both public investments, especially in transit, and disinvestment in neighborhoods—with the effect of accelerating displacement. Zuk et al.'s findings show that gentrification and displacement happen both simultaneously and reflexively.

Due to limited existing research, it was difficult for Zuk et al. (2015) to examine neighborhood change processes over long periods of time or at the regional scale; they pointed out that this type of research is needed to promote healthy community development without further burdening the least advantaged populations. The researchers found that existing data do not clearly define whether a move from a neighborhood is voluntary or involuntary, saying: “such a

distinction is nearly impossible to discern” (p. 3). Such vague qualifications for tracking and defining categories in existing housing data made it significantly unclear if the change processes had been catalyzed by voluntary growth or involuntary systemic pressures. However, the researchers did remark on the stability and resilience of neighborhoods whose “housing policy, community organizing, tenant protections and planning techniques used in the Bay Area [appeared] to have been somewhat successful in mitigating the pressures of gentrification and displacement” (p. 3). Zuk et al. presented a new understanding, specifically of the San Francisco Bay Area, in which gentrification and displacement must be viewed as an interconnected regionally systemic community-level process, impacting a large portion of the most vulnerable individuals, with the least ability to resist and recover. Zuk et al. believed it would take further research to determine which public improvement investments could accelerate neighborhood change in specific ways, but their findings proposed that these phenomenon are quite likely impactful. Zuk et al. suggested that merely planning for investments in particular neighborhoods, or disinvesting in a certain building, indeed appears to accelerate displacement and gentrification. Zuk et al. concluded that without further understanding of how manipulating these systemic processes takes place, the structural violence of gentrification would continue to harm the most vulnerable communities.

Sociopolitical Systemic Climate

Whittle et al. (2015) defined structural violence as economic and political organization resulting in social practices, institutions, or governments that neglect

to shield vulnerable populations from the forces of policy-level decision-making strategies, such as community planning and impact investments. Structural violence systemically impacts socioeconomic salience and limits an individual's or a population's ability to reach their full potential due to their systemic positionality. Approaching the education and social systems with a critical lens to the perspective of structural violence makes it possible to ask:

- What are the specific social and psychological mechanisms by which these structures are systematically translated to oppressive education practices?
- How does structural violence and oppression manifest psychologically among particular populations of students?

Understanding such bigger questions motivated this research on transformative teaching in a major city deeply impacted by structural violence, San Francisco.

In November 2014, two years before the recruiting began for this research study and the proposal was in its formal inception, the Black Lives Matter protests became the topic of San Francisco Bay Area classrooms. With protesting continuing into 2016, through recruiting participants and until interviews were well underway, the context that gave rise to the Black Lives Matter movement was also in large part the context that gave rise to this study. The names of the individuals whose lost lives were centered in the protests echoed down hallways: nationally people mourned Michael Brown, then Eric Garner; locally the students in SFUSD wore t-shirts to remember the lives of Alex Nieto, Almicar Perez Lopez, and Mario Woods. Maharawal (2017), a social anthropologist,

documented these protests through participants' observations at actual Black Lives Matter protests across five major Bay Area cities: in the streets, on highways, and bridges. Maharawal's analysis was supported by her "long-term ethnographic fieldwork within the housing-rights movement in the Bay Area" (p. 340). Maharawal's analysis sets the stage for understanding the social and political climate during which this research on transformative teaching in SFUSD was conducted.

Maharawal (2017) explained that an assessment of San Francisco's social and political climate, the epicenter of the Bay Area regional economy, must be viewed contextually because it is intrinsically interconnected with the surrounding cities across the Bay and in Silicon Valley, and the entire nation. Drawing upon accounts of the Black Lives Matter protests nationally, and thus subsequent analyses regarding the murder of people of color by police during this time period, Maharawal reported a complex, reflexive uprising against the structural violence and systemic oppression perpetuated through the processes of gentrification and displacement. The perspective provided by Maharawal's intersectional analysis offered sociological and anthropological insight into "the racialized suburbanization of poverty" (p. 340) facing SFUSD teachers and students at the time this study was conducted. Maharawal's anthropological perspective on the Bay Area's sociopolitical economy are useful for contextualizing the findings and discussion of this research on transformative teaching, in San Francisco, during the same time period.

Although it was coincidence that the Black Lives Matter protests were occurring as this study became formalized, the regional Bay Area social and political economic climate was intimately connected to the precipitating events. The Black Lives Matter protests serve as a historical marker for organizing and resistance by communities in the Bay Area region. Zuk et al. (2015) called for deeper research into the phenomena that accelerate gentrification and displacement, which have often caused irreparable harm to the Bay Area's most vulnerable populations. Maharawal's (2017) analysis showed that Zuk et al.'s phenomena of the gentrification processes, which are most harmful to vulnerable populations in the Bay Area, indeed became the very subject of national and local protests. The Bay Area's protests shared the national Black Lives Matter movement's "general critique of the racialized violence of policing, and the systematic targeting and killing of Black people by the US security regime" (p. 340). Maharawal argued that the local the Black Lives Matter movement was particularly in response to what she identified as a regional security regime. She demonstrated how the militaristic regime had been strategically employing racialized police violence through tactics designed to "protect capitalistic urban development, tech-led property speculation, gentrification and regional restructuring of the Bay Area's economy" (p. 340). The structurally violent practices identified by Maharawal were resulting in pressure across a regional social system with, as Zuk et al. found, a history of innovative resistance and marginally successful opposition to gentrification and displacement.

According to Maharawal's (2017) analysis, the forces shaping the Bay Area political economy leading up to the Black Lives Matter movement were "defined by gentrification, a speculative real estate boom, a housing affordability crisis, and the consequent 'eviction epidemic' precipitated by the massive impacts of the region's tech industry" (p. 340). San Francisco's real estate market was attracting international investors and tech giants; the rental market pricing increased rapidly as high numbers of apartments were being converted to AirBnB rentals and thus taken off the market for long-term residents. In the highly competitive and unstable real estate market, there was greater opportunity for power holders to leverage variables that could set off transformative changes in the sociopolitical economy. Maharawal demonstrated how local and national security regimes were then able to employ racialized tactics such as "broken window policing" (p. 344), "zero tolerance policies" (p. 344), or "law and order policing" (p. 344) to control vulnerable communities of people of color. These policing tactics were instituted with the objective of revanchism through military urbanism, or "securing urban space for capital re-investment" (p. 343). The systematic nature of these strategies constituted structural violence.

Maharawal (2017) discussed how the Bay Area local tensions were set against the backdrop of the U.S. "regime of racialized criminalization and incarceration" (p. 340) in which men of color are disproportionately incarcerated or monitored by the judicial system. Through sociopolitical systemic manipulation, "carceral landscapes" (p. 340) developed on which the new Jim Crow prison system had been organized for "enactment of surveillance" (p. 345)

of populations based on race lines. Maharawal argued that the neoliberal security state used the prison system organization to “manage racial capitalism and its crisis (including protests against it) through the production of even more securitized spaces” (p. 340). Thus, the security of previously communal urban space was developed and produced in the Bay Area through implementing techniques of racialized police violence. Secured spaces became “safe” spaces, which then became monetized through capital investments and subsequent gentrification of the community.

Maharawal (2017) found that the social and political crisis resulting in the Black Lives Matter protests in the Bay Area were responses to tech wealth flooding the urban real estate markets in the region. Urban gentrification and displacement had accelerated the suburbanization of poverty, which Maharawal demonstrated statistically coordinated with an increasing of the White population in San Francisco and Oakland. Simultaneously, the populations of Black and Latinx were increasingly “subject to criminalization, incarceration, and lethal forms of police violence at the hands of the security state” (p. 342). Vulnerable populations were ultimately being subjected to structural violence through systemic oppression, unless they gave up and relocated to suburban areas redesignated for low-income communities.

According to Maharawal (2017), the Bay Area’s local Black Lives Matter movement was able to articulate the complexity of the oppressive social and political infrastructures through critiquing the security state and the regional political economy. The regionally and nationally coordinated police responses to

protesting racialized structural violence demonstrated that “states of security operate at both micro and macro levels of social power” (p. 349). Regional and national security infrastructures flexed their ability to focus on perpetuating a sense of fear as a technique to control the social environment. Security regimes spread “racialized fantasies of crime” (p. 349) by over-policing areas in which localized “security projects” (p. 349) could become consolidated into a larger area of secured urban landscape. This process produced “its own affective environment of fear and lethality, leaving a string of deaths in . . . the shadow of tech-led gentrification” (p. 349). Maharawal concluded that the racialized security regime in the Bay Area was produced responsively with urban redevelopment and gentrification. Strategic, coordinated, urban planning was used as a method for sociospatial control to foster political and economic transformation in the region.

Reshaping the sociopolitical economic landscape of the cities in the Bay Area produced spaces that had already been revanchised by the urban security regime, as well as spaces that were still under significant contention. Maharawal (2017) reported that Josiah, a young Black teenager whom she had met walking in a protest, explained why he joined in the protests: “They don’t care about us. The police, the politicians, the city, they just want to kill us like we don’t matter” (p. 339). The Bay Area communities that were under the pressure of the security regime and structural racialized police violence responded in protest to their experiences of systemic oppression. Included in these communities were families, teenagers, and children who received the message that they did not have value to contribute as citizens of the city and neighborhoods in which they lived and went

to school. Old and young people stood together to voice anger at the disenfranchisement they experienced in their everyday lives.

The Schools in This Study

Six of the 10 San Francisco middle and high schools that participated in this study almost exclusively serve students living in areas that continue to be under significant contention as a result of revanchist gentrification and displacement processes. The schools are mostly in the southeast quarter of the city. It is an area of extreme poverty, high pollution, little remaining industry, poor infrastructure, just a few low quality grocery stores, and a hefty history of gang violence on the front lines of a social war. Rather than utilizing city planning to support historically marginalized communities in rebuilding from decades of oppression, intergenerational trauma, and socially imposed poverty, the city has instead planned investments for high priced condos that make room for a wealthier, Whiter, population to rapidly move in. In accordance with Maharawal's (2017) position, the incoming population creates the opening for racialized police violence to further securitize the area, in order to create a safe space for additional capital investment catering to the newly gentrified community. Many of the most oppressed families have been forced to move out of San Francisco, rather than watch their children perish in the streets as victims of social warfare: stay and risk death by gunfire, addiction, prostitution, or the slow stench of a soul rotting from social oppression. The southeast quarter of San Francisco is home to most of the students attending the schools that participated in this transformative teaching study. The students in the classes I personally taught often expressed pride in

where they were from; they liked to represent their neighborhoods. Students and even participants in the study were living in the remaining contentious neighborhoods of San Francisco, representing Hunters Point, Sunnydale, Double Rock, Harbor, West Point, Potrero, Alemany, Oakdale, and the outer Mission. These resilient communities continue to push back against militarized racialized suburbanization despite the structural violence of gentrification and displacement in San Francisco.

CHAPTER 2: LITERATURE REVIEW

This chapter reviews literature relevant to understanding the significance of this research study. Roeser et al. (2002) found a need for pedagogical techniques to be developed for pragmatically addressing limiting learning-related worldviews in adolescent learning. Roeser et al. offered empirical evidence to support the need for transformative theories to be applied to adolescent psychology; however, little research has since been conducted to fulfill their request. Through a synthesis of literature belonging to the field of transformative education, Slavich and Zimbardo (2012) derived the core tenets and principles of transformative teaching, looking at applicable literature across a variety of teaching styles and levels of student development. They argued that although it is still not clear what transformative teaching looks like while it is actually happening, it is nonetheless an effective existing pedagogy in need of further exploration.

Conversely, transformative learning is a well-established area of academic literature developed through a focus specifically on adult education (Mezirow, 2012), which Slavich and Zimbardo (2012) did include in their survey of literature. In the field of transformative learning, debate exists about the transferability of concepts developed for adult learning to adolescent learning (Dirkx, 2012), which in turn raises questions around what demarcates an individual's readiness to engage in transformative learning (Merriam, 2004). Kitchner (1983) offered a possibility for demarcating an individual's readiness to engage in transformative processes through conceptualizing epistemic cognition,

which, he explained, typically is not developed until young adulthood. Johnson-Bailey (2012) posited that the true prerequisite is not age or level of cognitive capacity, but consciousness of one's own position in the context of social systems. Bailey's position leads to further questions about whether or not transformative teachers can foster an earlier development of epistemic cognition during what is typically considered adolescence.

Schlitz et al. (2008, 2010) did not express any language about age as a concerning factor for engaging in transformation. Rather, they found that increasing self and social consciousness fosters transformation, and then designed a nested systems model to describe this process. Thus, if an individual has no consciousness of transforming their own worldview, research suggests it is unlikely they are able to be truly transformative teachers because explicitly modeling authentic engagement in transformational processes is fundamental to transformative teaching (Cranton & Carussetta, 2004; Slavich & Zimbardo, 2012). Additional research by Schlitz et al. (2011) was conducted based on the understanding of transformation defined in the Schlitz et al. (2008, 2010) studies. The researchers turned the findings from the Schlitz et al. (2008, 2010) work into what the Schlitz et al. (2011) research named the Worldview Explorations Project (WVEP, formerly The Worldview Literacy Project). It was a curriculum designed to foster accelerated worldview transformation in adolescent and young adult students within a classroom context. The Schlitz et al. (2011) research implemented the curriculum and found that both students and teachers were capable of engaging in worldview transformation during the course of the study

and that age did not appear to be a limiting factor. This curriculum is proprietary material, held privately by the Institute of Noetic Sciences, and is not publicly available. Although limited evidence from the Schlitz et al. (2011) research demonstrates that adolescents are able to engage in transformative learning, no peer-reviewed research clearly describes what is happening that makes this possible in the adolescent classroom.

Slavich and Zimbardo (2012) requested that researchers develop an empirical model describing what transformative teaching actually looks like. It is hypothesized that transformative teaching must already be happening in adolescent classrooms, to at least some degree, some of the time. This literature review outlines research surrounding what transformative teaching actually is, questions about whether or not adolescents are capable of engaging in transformative learning, and what are the variables that make it possible for adolescent students and teachers to engage in transformative education.

Limiting Learning-Related Worldviews

Students may not necessarily recognize that worldview is reflexively linked with their ability to authentically engage in the learning process (Roeser et al., 2002). This lack of understanding affects the student's beliefs about why they encounter unique and personal challenges quite differently than classroom peers. In order to determine which learning-related beliefs, values, and assumptions are motivating or limiting the growth of students, Roeser et al. (2002) explored early adolescents' cognitive and behavioral engagement in correlation to quality of learning in the classroom. Roeser et al. investigated students' (a) views of

themselves as learners, (b) efficacy beliefs regarding perceived competence and intelligence, (c) task-related values and emotions (like interest), and (d) goals for learning and the future. The study used a convenience sample of 97 middle school participants from five classrooms in the San Francisco Bay area, serving primarily middle- to upper-class families. No other qualifications were described for how participants were chosen. The participants were 57 female and 40 male students of Caucasian (85%), Asian-American (12%), African-American (2%), and Latino (1%) descent, averaging 13.08 years old (p. 350).

Research assistants administered two different styles of surveys to the participants (Roeser et al., 2002). The portion of the surveys regarding academics were given in science or social studies classes and were read aloud to the students by the research assistant while the students followed along and recorded their answers. For privacy, the portion related to students' mental health was administered silently in class. The research assistant provided individual guidance to participants if they had questions. To develop the surveys, Roeser et al. (2002) combined two different person-centered research methods. The first method, derived from Dweck and Leggett (1988), integrated the educational issue of examining beliefs about the self and mental health issues with goals for the future and the way students self-evaluate; it was employed and modified by others as well (Dweck, 1986; Dweck & Wortman, 1982; Kaplan & Midgley, 1997). The second method, derived from Roeser, Eccles, and Sameroff (2000), grouped students based on view of learning ability, beliefs about ability to demonstrate learning (efficacy beliefs), value of education in attaining goals to the student, and

the student's emotions or anxiety related to learning. These measures were also used by others (Roeser, Eccles, & Freedman-Doan, 1999; Roeser, Eccles, & Sameroff, 1998; Roeser, Eccles, & Strobel, 1998). The approaches of these two research methods were combined to develop one method employed by the Roeser et al. (2002) study that enabled the researchers to first organize the students into motivational subgroups of adolescents who participate in, disrupt, or withdraw from learning activities, and then analyze the types of learning-related self- and worldviews commonly shared in each subgroup. The combined research method measured motivation through self-reported beliefs, values, and goals related to academic competence. Social-emotional functioning was evaluated according to the students' self-reported ability to deal with distress and level of self-esteem. Engagement in cognitive and classroom processes were assessed through student self-report on learning strategies and metacognitive awareness. Roeser et al. looked at how poor learning-related beliefs, values, and assumptions affected the students' ability to pay attention and focus; students' self-reported acting-out behaviors were categorized as refusal, disruptive, and social problem issues.

Associations were found between social-emotional functioning and both cognitive and behavioral engagement (Roeser et al., 2002). The study results showed that student motivation is dependent upon efficacy beliefs, value of education, and goals for learning, in a variety of combinations. For example, students who valued task mastery, learning, and subject-matter, and who held self-improvement goals reported more frequent use of learning and self-regulation strategies and were less likely to act out. Students who exhibited lack of attention

or focus, high levels of distraction, and avoided engaging in classroom activities were correlated with beliefs regarding fixed levels of intelligence, with not feeling efficacious academically, and having a desire to hide levels of competence or understanding. Although these results were derived from statistical analysis, the study could have been strengthened and possible error reduced related to student self-report by correlating qualitative samples of student work and interviews to the quantitative results.

In the findings, Roeser et al. (2002) posited that motivations for learning and academic engagement are significantly affected by student worldview, which contains self-view. They suggested that it would be beneficial to students, teachers, and classroom learning if a method to address beliefs, values, goals, and emotions around learning could be empirically developed, and asked for research aimed specifically at guiding classroom teachers in developing methods that (a) nurture motivation to learn, (b) foster more academically efficacious worldviews, (c) address beliefs about how students view themselves in relationship to the world outside of the classroom, and (d) assist students in the creation of appropriate goals for the future. These are issues addressed in the largely theoretical field of transformative teaching.

Transformative Teaching

Slavich and Zimbardo (2012) defined transformative teaching as having the expressed or unexpressed goal to “enhance students’ mastery of course concepts, their learning-related skills, and their disposition toward learning. Without all three of these components, the approach would seem to fall within the

constraints of traditional classroom instruction . . . or motivationally guided personal exploration” (p. 597). An overarching intention is to promote student learning and personal growth through creating “dynamic relationships between teachers, students, and a shared body of knowledge” (p. 569), thus the whole classroom system grows and evolves together. The transformative teacher models explicit transparency in their thinking about learning-related beliefs, values, and assumptions to such a degree that students learn to transform their own inner processes. Essential to transformative teaching is the idea that “instructors can guide students toward making self-discoveries that shape their fundamental beliefs about themselves” (p. 577). Slavich and Zimbardo raised a significant query about the need to identify the components of transformation so that it may be understood by anyone, such as a student or a teacher, who has never experienced transformation, or has, but does not fully understand all of the contributing variables. They suggest that research focus on examining the role of teachers in shaping the students’ transformation and also the level of responsibility that students have in influencing their own and their peers’ learning experience. The responsibility may need to be delegated by the teacher, while the students do hold each other to a certain level of responsibility for their own and their peers learning.

The Slavich and Zimbardo (2012) research was published 40 years after the initial formation of the field of adult transformative learning theory (Mezirow, 1969). The Slavich and Zimbardo (2012) synthesis of the existing literature did not differentiate between adult and adolescent students as related to

transformative teaching. They discussed the foundational philosophies of constructivism and social constructivism, and then the more closely related adult transformative learning theory, intentional change theory, social cognitive theory, and transformational leadership; through this discussion they worked to synthesize the similarities of each theory, and intentionally abstained from critically contrasting the fields. They did acknowledge that “elementary and secondary schools vs. adult education” (p. 574) are different in that they “constitute largely separate literatures” (p. 574); however, they found it more important to look for the similarities between them. Instead, they

presented a general formulation of transformational teaching that may be applied for understanding learning at any level of instruction (e.g., preschool, elementary school, middle school, secondary school, higher education, and adult education). Exactly how transformational teaching is represented at these different levels of instruction, however, remains an open question. (p. 597)

Slavich and Zimbardo (2012) used the term transformational teaching, while other authors call it transformative teaching, which is used in this dissertation for simplicity. Although Slavich and Zimbardo do distinguish between the manifestations of transformative teaching at different levels, they do not say anything about the ability of the student to engage in transformative learning. They ask for research that focuses on the goals of transformative teaching as related to “the specific skills and capabilities that learners of different ages bring to the classroom” (p. 598). Slavich and Zimbardo approach differing levels of learning inclusively. Each layer is a foundation for improving the next, deeper, instance of transformative teaching and learning. Through understanding what transformative education looks like across ages, possible ways to foster

development of foundational variables impacting capacity to engage in more complex level of transformations can be studied.

In their study, Slavich and Zimbardo (2012) intentionally made no distinction between adult and adolescent students. They found that best practices to foster worldview transformation have not been empirically demonstrated, and that this need must be filled so teachers can follow a specific teaching method to foster transformative learning in their classrooms. In addition to the lack of clarity surrounding what transformative teaching looks like, a major question that remains in the literature is whether age is an indicator for determining a student's readiness to engage in transformative learning processes. Are adolescents even capable of engaging in transformative learning? Adult transformative learning theory posits that such processes are inaccessible to adolescents for developmental reasons, related to a level of cognitive problem-solving capacity that appears to not develop until adulthood (Mezirow, 2012) and because adolescents have not fully developed an individuated adult ego (Dirkx, 2012).

Mezirow (1969, 1978a, 1978b) initiated the development of a grounded theory of adult transformative learning; particularly seminal was Mezirow's (1978a) 10-step process for transformational learning. Mezirow's theory was edited, critiqued, and developed over time, but can be summarized into four points: (a) the event of some disorienting dilemma or questioning of the individual's worldview or framework of meaning-making, (b) critical reflection on the event and assumptions held at that time, (c) discussion of the event with others to create meaning of the event, and (d) integrating the meaning into the

individual's framework of understanding or worldview so that the individual can continue to grow from what they learned as a result of the event. These points do not distinguish between intentionally or unintentionally embarked upon transformative experiences (see Mezirow [2012] for his most recent complete iteration of the transformative learning process).

Mezirow (2012) explained that his formulation for transformative learning occurs during Kitchener's (1983) highest level of cognitive processing, epistemic cognition. At this level, individuals learn how to be conscious of their problem solving when "engaged in ill-structured problems, i.e. those which do not have an absolutely correct solution" (Kitchener, 1983, p. 230). According to this model, individuals do not reach this stage of cognitive development until late adolescence, positing that adolescents cannot understand the limits and certainty of knowledge, nor can they understand the criterion for knowing.

Dirkx (2012) supported the position that it is not possible to teach transformative principles and modalities to adolescents because they have not yet fully individuated or authentically developed a healthy adult ego. Ego-consciousness is described as being connected through the transpersonal—the relational space that individuals and communities share—and often members of the same family, social group, community or culture "will share a common unconscious structure" (p. 122). Dirkx posited that adolescents are still too enmeshed with their environment, community, and family to understand how these dynamics are at play in their own lives. Dirkx explained that it is necessary

to take these deep structures and dynamics into consideration in order to integrate potentially transformative shifts.

Is it certain that individuals deeply submerged in isolated disempowered communities will ever have the opportunity to reach such a high level of cognitive development as Mezirow's (2012) work posited is required? Critical social theorist Brookfield (2012) explained that this perspective perpetuates a social dynamic that maintains a hand of control over society by those currently in the empowered position, and calls for support of the growing imperative to bring principles such as worldview transformation into the adolescent classroom.

Merriam (2004) examined the role of cognitive development in Mezirow's transformative learning theory, and asked if learners of all ages can be ready to engage in transformative learning. She concluded that the two components of the theory, critical reflection and rational discourse, must be engaged with through a certain level of advanced cognition; however, not even all adults have attained the more advanced cognitive abilities that allow them to do so. Merriam questioned whether it is maturity that enables an individual to engage in transformative learning rather than cognitive development. What other variables impact readiness to engage in transformative learning?

Although Kitchner's (1983) epistemic level of cognition and other high-level cognitive capacities do not appear to develop until very late adolescence, do some adolescents nonetheless engage in transformative learning? Can a dynamic be created in the teacher-student exchange that can facilitate learning how to do so? Johnson-Bailey's (2012) work provides an answer: it depends on how

consciously aware the individual learner is of their social positionality. She explained that consciousness of positionality precedes and fosters transformative learning and that what is needed is a model that demonstrates steps to foster experiences of openness in an individual's or group's mindset that invites critical self-reflection on how an individual aligns their own thoughts, words, actions, and intentions through examination of their own worldview. Sorrells (2015) defined *social positionality* as follows:

One's social location or position within an intersecting web of socially constructed hierarchical categories. . . . Different experiences, understanding, and knowledge of oneself and the world are gained, accessed, and produced based on one's positionality. Positionality is a relational concept. In other words, when we consider positionality, we are thinking about how we are positioned in relation to others within these intersecting social categories and how we are positioned in terms of power. The socially constructed categories of race, gender, class, sexuality, nationality, religion, and ableness are hierarchical systems that often connote and confer material and symbolic power. (p. 13)

Critical theorists such as Elias and Merriam (2005) discussed the significance of the learner's systemic positionality, highlighting that initial iterations of adult transformative learning theory neglected to take into account the impact of positionality on the potential capacity to engage in transformative learning. The individual's awareness of their positionality is impacted by their relationship to societal structures, their level of immersion within shared worldviews, their ability to reflect on or be conscious of the worldviews that form societal structures, and other factors. Changes in awareness, however, do not appear to shift in parallel relationship to aging. Consciousness of social positionality aligns with Schlitz et al.'s (2010) explanation of the reflexivity that

appears to take place between levels of social consciousness as part of the transformational process, described in the next section.

Definition of Transformative Experiences

Schlitz et al. (2008, 2010) found that there are many variables impacting consciousness of social positionality. While their model offered no specific arguments regarding age as a variable impacting an individual's capacity, ability, or readiness to engage in transformative learning, they offered an analysis of the psychological processes involved in transformation, discussed below. With the exception of the argument made by Dirkx (2012) regarding adult transformative learning theory and epistemic cognition, little to no theory or empirical evidence specifically suggests that adolescents may not be capable of engaging in psychological transformation. Epistemic cognition is addressed further in Chapter 6: Discussion. The Schlitz et al. (2008, 2010) model for defining transformative experiences is adhered to for this research on transformative teaching in adolescent education in light of these authors application of their research findings on transformative experiences into adolescent pedagogy.

The Schlitz et al. (2008, 2010) model is significant in that it explains transformation as both a collective and individual, socially reflexive process than can range from being unintentionally catalyzed by some outside event to being catalyzed by conscious initiation on the part of the transforming individual or group. The catalyst these authors' model is comparable to the disorienting dilemma (Mezirow 1969, 1978a, 1978b, 2012), discussed above. Although the Schlitz et al. (2008, 2010) research was conducted to define the lived experience

of transformation and excluded Mezirow's work, both bodies of research acknowledged that there was some pivotal point through which the transformative process continues on its own, out of necessity, to find new ways for making meaning that is more relevant and aligned with the individuals experiences.

Schlitz et al. (2010) completed a 13-year mixed methods study examining a wide variety of transformative processes in order to discern the common qualitative properties across many different types of experiences. Schlitz et al. found that transformative experiences draw attention to no-longer-effective worldviews, bringing awareness to the limiting beliefs, values, and assumptions that are preventing growth or achievement of goals. The individual's worldview must shift and change in order to accommodate and assimilate meaning made through the new awareness. Continued transformation is catalyzed through the development of an introspective practice of learning to become more conscious of the structure and organization of one's own schematic organization, or worldview.

The Schiltz et al. (2010) qualitative methods study was comprised of three short-term and two longitudinal substudies, each employing a different method to determine the commonalities in transformative processes, regardless of culture or practice. For the first short-term substudy, the researchers conducted three focus groups made up of teachers and leaders in the human potential movement living and working in the San Francisco Bay Area as teachers (not scholastic) of the transformative process. For the second short-term substudy, the researchers conducted in-depth interviews with 60 globally renowned teachers, scholars, and practitioners of ancient and modern transformative traditions who were chosen to

be broadly representative of 41 transformative practices and philosophies. For the third short-term substudy, the researchers surveyed a self-selected group (not representative of the average U.S. household) of over 1,500 online participants who had experienced personal transformations. The researchers also conducted two longitudinal substudies. In the first, individuals participated in a community-based transformative practice program, where the researchers tracked the participants' transformative experiences. In the second longitudinal sub study, the researchers followed participants as they engaged in transformative practices to determine the effect of transformation on health and well-being. For all five of the research study components, participants were only considered based on the qualification of experience with transformation; there was no control for age, gender, health, or socioeconomic status.

Significant qualitative data from all five subcomponents of the study were published in a book (Schlitz et al., 2008), although analytical synthesis of the study's findings was published in an academic journal (Schlitz et al., 2010). The results were shared in the form of personal narrative expositions of transformation experienced by participants and discussion by the authors. There was no further explanation provided about any screening process for recruiting participants or any other specifics about the way the studies were conducted or about the statistical data analysis. A shortcoming of the study is inadequate reporting for recruiting, inclusion criteria, demographics, the duration of the focus groups, the research procedures, interview questions, and overlap in populations for the sub studies. Although this study does not make specific distinction between

adolescent and adult participants, they do use the results of this study as the foundation for further research (Schlitz et al., 2011) specifically with adolescent worldview transformation in the educational setting, as discussed in a subsequent section below.

Schlitz et al. (2010) found that the transforming individual expands self-awareness through engaging in critical self-reflection. They developed a model that describes the transformative process as one in which, as a result of engaging in critical self-reflection, the individual outgrows, eliminates, edits, or replaces no-longer-useful schemas. Then, this reorganization enables more functional modes of examining perceptions to develop. Perception is shifted through scaffolding new beliefs or information onto existing schemas. The scaffold is a temporary support structure formed using abstract understanding. This support allows for the release of outdated, no-longer-useful information or understanding. Over time, deeper schematic integration occurs, transferring abstract information and understanding into formalized operational and concrete schematics of knowledge. Ideally, schematic integration provides lasting relief from the cognitive dissonance that arises through simultaneously holding conflicting worldviews, but if relief is not experienced, transformation continues. It bears noting that this model for information processing is similar to Piaget's (1977) developmental model, including assimilation and accommodation of new meaning, with transitions through sequential evolving schemata. The concept of schematic reorganization and integration raises a question around the notion that the mechanism by which transformative learning occurs may be present at all

stages of cognitive development. Further exploration of this comparison is beyond the scope of this project, although is an area recommended for future research.

Nonlinear Model for Developing Social Consciousness

Schlitz et al. (2010) gained an understanding of the transformative process, which is a nonlinear model for change divided into five nested levels of social consciousness. *Social consciousness* is defined as the “awareness of being part of an interrelated community of others” (p. 21). Schlitz et al. found that individuals go through the levels of social consciousness, described below, during the ongoing transformative process in an order that is dependent on the individual’s subjective and direct experience. Schlitz et al.’s model is both a reflexive cognitive and affective learning process through which the awareness of worldview enhances explicit social consciousness, further inspiring and driving worldview transformation. The first level of social consciousness Schlitz et al. identified was the embedded level, in which consciousness is formed without being aware of social, cultural, and biological influences. The second, the self-reflexive level, is when awareness of how the social world affects the individual’s experiences becomes conscious through mindfulness practices, contemplation, and reflection. The third, the engaged level, is when the individual is motivated by their conscious social awareness to become a participant in a process that contributes to the greater world outside the individual’s private, inner world. The fourth, the collaborative level, is when the individual recognizes the cocreative, reflexive nature of the social environment, then acts to consciously have an effect on it. At the fifth and deepest level, the resonant level, people report feeling a

sense of interconnectedness and interrelatedness with others that stimulates social transformation with an effect beyond the individual. Schlitz et al. relate this stage to the field of transpersonal psychology, explaining that it is similar to a transpersonal expanded state of consciousness that transcends the ego or sense of individual self.

Changing relationship to the levels of social consciousness inherently affects the individual's worldview, resulting in a change in the way the individual relates to, operates in, and interacts with the world (Schlitz et al., 2010). As consciousness is not the operating self, but the awareness of the operating self, this model is less significantly about what level the individual is on, and more significantly about how aware the individual is of their self in relationship to the levels. According to the results of the Schlitz et al. (2010) study, it is through the process of developing social consciousness that individuals and groups cultivate an awareness of themselves in relationship to other individuals and the world, becoming conscious of the fact that their thoughts, words, and actions influence others, and others are likewise influencing them, thus catalyzing transformation by actively participating in relationships. Study participant Rachel Naoimi Remen, MD, founder of The Institute for the Study of Health & Illness at Commonweal, was quoted in the data saying, "A transformation in [worldview] affects a kind of double vision in people. They see more than one reality at the same time, which gives a depth to both their experience and to their response to the experience" (Schlitz et al., 2008, p. 14). Transformation can continue by practicing awareness of the defining organizational structures of the actual

relationships developing between individuals and the world, while also practicing awareness of how the relationships reflexively affect the growth of everyone involved with the relationship. The findings showed that personal transformation is a participatory experience, involving a variety of catalysts, in which examination and critical self-reflection of an individual's or group's worldview occurs, resulting in adoption of different beliefs, values, and assumptions. Expanding capacity for self-reflexivity is the driving force of continued worldview transformation. Complete worldview transformation occurs through a fundamental shift in the individual's perspective, resulting in changes in behavior and in the individual's perception of self and others.

Ethical Considerations

Schlitz et al. (2010) discussed research on belief structures, showing that subtle unconscious priming can manipulate solid belief structures, leaving both the teacher and the student vulnerable to adopting inauthentic worldviews they may otherwise not agree with. Accidentally or intentionally promoting the adoption of beliefs, values, or assumptions the student may not choose otherwise calls into consideration the ethical nature of working with young or naïve individuals who may be highly susceptible to suggestion and are more likely to submit to the directives of others. This type of oppressive entrainment could particularly be the case when an individual is re-examining beliefs, values, or assumptions and is searching for a replacement understanding of the world. The naïve student therefore may be led to adopt dogmatic or limiting worldviews that a discerning individual may have otherwise rejected. In consideration of the

possibility that an individual or group may be unconsciously directed to behave in a certain way or notice particular things and not others, Schlitz et al. (2010) determined that it is ethically essential to teach the five nested levels of social consciousness together when explicitly teaching for worldview transformation. Teaching these together will help to ensure that students are, to at least some degree, consciously aware of the process they are participating in, making them less vulnerable to unconsciously adopting unhealthy or more limiting worldviews.

Slavich and Zimbardo (2012) recognized the ethical risk of inappropriately imposing worldviews on students, and called for teaching methodology that supports teachers in authentically engaging in a participatory learning process as a model of the transformative process. Slavich and Zimbardo recognized that it is essential for teachers to understand what they are modeling to the students through their thoughts, words, and actions so that teachers do not perpetuate limiting learning-related worldviews. The teachers' ethical responsibility is to protect the student from abuse, which can include cultural proselytization. On a fundamental level, transformational teachers aim to do much more than to "simply get students excited about learning or to persuade students to adopt a particular worldview" (p. 506). The emphasis is not an attempt to push students to adopt the worldviews of the teachers or school regarding particular beliefs around religion, sexuality, politics, or similar categories. Rather, the objective is to foster shifts in the foundational structures for how students make meaning from what they experience, learn, and translate into knowledge, which is inextricably linked with the ability to be conscious of these structures.

Transformative Teachers Model Transformation

Slavich and Zimbardo (2012) identified that transformative teachers effectively model the steps in the thinking process for the students in the classroom so that the students understand the evaluations, reflections, and approaches in order to follow the teacher's example. This metacognitive modeling is similar to how an athletic coach may demonstrate examples of appropriate behavior, task completion, conduct, affect, or decision-making. In more self-directed learning processes, the student begins with knowledge of the foundational steps in the process and then tailors the modeled process to align with their own learning abilities. Teachers are often transparent about modeling their thinking process when demonstrating mathematical or scientific processes, but transformative teachers' modeling applies to other topics as well, including self-understanding and critical self-reflection. Slavich and Zimbardo note that transformative teachers model how to critically self-reflect upon their own underlying epistemic assumptions. Then they model how to develop a new perspective for looking at the learning situation. They specifically demonstrate authentic engagement in critical self-reflection as a participatory learning process. Although Slavich and Zimbardo were able to discern that transformative teachers model, guide, and facilitate transformation, they were unable to find empirical research that provides a clear picture of what authentic transformative teaching looks like so that other teachers would be able to learn from it and adopt it.

Authenticity in Transformative Teaching

The teacher must have first been able to authentically engage with the transformative process as it applies to their own life and experiences in order for them to properly facilitate this process for their students. Cranton and Carusetta (2004) focused on the recognition that in order for transformative education to be effective for both the teacher and the student, the process must be authentically engaged with on the part of the teacher as model and the student as learner. The recruiting method used in the Cranton and Carusetta study is, in part, adopted for the purposes of this research study, which is discussed further in Chapter 3: Research Methods.

Cranton and Carusetta (2004) used a grounded theory method to identify the qualities of teachers who, according to their colleagues, model authentic engagement in a participatory learning process and are authentic in their teaching practice. The study defined qualities required to be an authentically engaged teacher who models transformative self-reflective processes. Over three years researchers examined what authentic engagement in teaching looks like across a variety of disciplines and how authenticity was manifested in the teaching practice of 22 university educators. They did not define authenticity in recruitment because the purpose was to discern what common qualities qualified these teachers as authentic. Proportionate to the university population, 13 female and 9 male faculties from 13 disciplines ranging from botany to economics to psychology to nursing were recruited through nomination by colleagues and administrators. The researchers said they were interested in working with both

new and experienced authentically engaged teachers but felt the number of new faculty who participated in the study was disproportionately low as many of the new faculty felt they did not have extra time to devote to the study. Fifteen of the participants were experienced faculty, three were considered senior scholars and five were award-winning teachers. No other information about the participants was taken into account aside from nomination, willingness, and availability to be participants.

Cranton and Carusetta's (2004) team conducted four interviews over two years and one teaching observation each year for each of the participants. The interviews were conducted by two members of the research team and were recorded. The first interviews focused on the teachers' stories of how they came to be a teacher and questions surrounding authenticity such as how participants relate to students and how participants view institutional constraints on teaching. The follow-up interviews were more loosely formatted as the questions in these interviews were based on the individual participant's responses from previous interviews.

After the second year of the study Cranton and Carusetta's (2004) research team had transcribed the interviews and observation notes. The researchers shared the interview notes and observations with the participants, who found the feedback helpful for teaching. From the interviews and observations the researchers developed seven discussion topics. Then they held focus groups with six of the participants in each group. The discussion topics were in regards to the participants' relationship to students and colleagues in the learning environment,

and included topics of self-awareness, social consciousness, self-reflection, and beliefs about themselves as a teachers or a student. The focus groups were also recorded and transcribed

Cranton and Carusetta (2004) found that the participants commonly had these five qualities as a teacher and a person: (a) understanding of one's own worldview both as a teacher and as a person, (b) being consciously aware of relating to the students and others as equal human beings, (c) understanding, defining, and cultivating strong relationships between oneself as a teacher and the students, (d) understanding that these relationships influence the student inside and outside the classroom, and (e) engaging in critical self-reflection to be aware of and improve the behaviors in each of the previous categories. Cranton and Carusetta found that when an individual understands oneself, both as a teacher and as a person, that person is more consciously engaged, and therefore acts in alignment with proclaimed beliefs, values, and assumptions or worldview. The teacher thus models for the students, through thoughts, words, and actions, that being authentically engaged in a participatory learning process fosters positive experiences of growth and self-development. Authentically engaged teachers are more likely be fully representative of their whole person in the classroom, express more passion while teaching, and know what works for them best as teachers. These teachers view teaching as vocational work, meaning they feel called to be engaged in a dynamic teaching and learning relationship rather than treating teaching as a job where they present information to students. Teachers who are authentically engaged inherently model the expected level of participation in the

classroom to students. They also model the level of awareness that students are expected to bring into learning and relationships with themselves and others. Authentically engaged teachers demonstrate an awareness and conscious examination of how actions and behaviors are aligned with their worldviews. They encourage students and colleagues to adhere to this same standard.

A Call for a Model for Instruction in Transformative Teaching

Slavich and Zimbardo (2012) contend that, at the heart of transformative teaching and learning experiences, teachers facilitate a process in which students generate knowledge and meaning through participating in experiences that lead to the realization of conflicting beliefs, values, and assumptions associated with a concept or idea. This conflict creates the experience of cognitive dissonance, which is gently built up through a definitive initiation process that constructs scaffolding to support schematic reorganization and integration (Cooper, 2007). Students can be prepared for the cognitive dissonance that comes from learning new information through bringing conscious awareness to the stretching boundaries of perception and understanding. A worldview, or small pieces of it, can be deconstructed, pulled apart, reorganized, and looked at from different directions. When students are supported in transformative learning experiences, the stress and discomfort arising from dissonance becomes diminished during experiences such as shifting worldview because the students are learning to approach problems with support from the scaffolding, support beams, and small steps put in by the teacher. The student is not only learning information, the student is learning how to approach learning information differently and how to

hold conflicting ideas that at first may feel too big or overwhelming. In order to truly understand how to implement transformative teaching in classrooms and schools where it is not already happening, Slavich and Zimbardo (2012) asked for an empirically tested model for instruction that provides a clear demonstration of what it looks like in action and how to do it effectively across different levels of readiness.

Researchers Began to Formulate a Model for Instruction of Transformative Teaching

Keeping in mind the vagueness in the literature regarding the marker for determining readiness or ability to engage in transformative learning processes, Schlitz et al. (2011) conducted a final piece of research to determine whether they could catalyze initiation of the transformative process both in adolescents and teachers in a public school setting. Schlitz et al. utilized the reflexive change process defined by the five nested levels of social consciousness (discussed above, Schlitz et al., 2008, 2010) as the foundation for developing and testing the transformative teaching curriculum, the WVEP, which they published as a freestanding piece of research. The WVEP study provides an opportunity to understand that worldview transformations and transformative teaching can certainly happen in the adolescent public school classroom. However, it still does not provide evidence of what is already happening in classrooms toward this objective because the design of the study focuses on testing the implementation of a proprietary curriculum. The WVEP is a set of lesson plans specifically designed to foster worldview transformation; the research did not examine how successful

transformative teaching is already happening in the classroom during regular instruction. Fulfilling the need for an empirically developed transformative teaching instructional process model that can be integrated into classroom instruction as it is already happening, requested by Slavich and Zimbardo (2012), is still needed despite that this WVEP demonstrates it is possible to intentionally foster worldview transformation in adolescent classrooms.

The team of researchers developed a curriculum that can be implemented at various grade levels, during all stages of the five nested levels of social consciousness, while using a range of cognitive abilities, and also integrated into different types of instructional formats (Schlitz et al., 2011). It is specifically designed to be effective across the great diversity of worldviews encountered in the national public school system. The curriculum was written in accordance with California and national academic standards. The WVEP was designed to engage the students and the teacher together in worldview transformation, using inquiry-based, experiential, and participatory methods. Schlitz et al. collaborated with nearly 1,500 students in eight high schools, two elementary schools, and four university classes in the San Francisco Bay Area. The WVEP study used 45-minute drop-in lessons to facilitate direct experiences of guided critical self-reflection.

Using the Schlitz et al. (2011) curriculum, the teacher models the worldview transformation process through authentically engaging in their own examination of beliefs, values, and assumptions. The whole class participates together in the transformative process via explicit explorations of worldview and

social consciousness. The curriculum was designed to catalyze examination and questioning of perspectives to the degree that perception is shifted. Shifts in worldview take place incrementally so that the participants are able to integrate the new perspective without experiencing unnecessarily uncomfortable cognitive dissonance. Explicitly teaching students that it is possible to see situations differently than they had previously thought is the foundation of catalyzing worldview transformation as part of a classroom participatory process.

Training Transformative Teachers

Schlitz et al. (2011) raised concerns about the teacher's ability to be a facilitator for the WVEP. They were unsure if all potential facilitators would have the capacity to undertake an examination of their own deep belief structures, and therefore be able to model this process for students. This concern is reflected in the questions raised by adult transformative learning theory surrounding an adult's ability to engage in what is considered the required level of mental capacity for consciously participating in transformation: epistemic cognition (Mezirow, 2012). Maggioni and Parkinson (2008) found that teachers' epistemic beliefs and epistemic cognitive capacities impact their method of instruction and the epistemic cognitive skills that are developed in their students. More specifically, teachers holding empiricist beliefs that knowledge is a truth to be uncovered through rigorous scientific processes also believed that students are recipients of knowledge, rather than codiscoverers. These teachers tend to dominate classroom discussions, rely on memorization of facts, require demonstration of understanding as taught by the teacher, and avoid controversial

topics or ill-structured problems that are open to interpretation. They also consider “wrong” answers or unique approaches as failures on the part of the student rather than valid alternative ways of viewing the situation or problem. This is more likely to foster rejection of classroom learning on the part of the student when perspectives taught in the classroom do not align with the epistemic beliefs learned at home. Notably, teachers holding this perspective “often used a pattern of interactions characterized by teacher-initiated questions, students’ response, and teacher evaluation of competing outcomes” (p. 7), which relates to the discussion of the teacher–student exchange points in Chapter 3: Research Methods.

Conversely, Maggioni and Parkinson (2008) determined that teachers holding constructivist beliefs were more able to approach classroom instruction as a discovery process embarked upon by the students and teacher together. These teachers tended to be more able to detect nuances in the perspectives presented by students and address specific misconceptions as a technique for fostering integration of the new knowledge into already-existing views. These teachers were able to apply a wider variety of teaching strategies to engage students in the exploration process and guide students in constructing new meaning for themselves in a way that is relevant to their own beliefs. They were more able to hold conflicting viewpoints on ill-structured problems and more likely to engage in discussion of controversial topics that may not have a single right answer. These teachers are able to include multiple facets into the teacher–student

exchange point, such as other students' perspectives and speculation on other possible ways to view the situation.

WVEP Process and Findings

Schlitz et al. (2011) found that regardless of the actual level of cognition required to engage in the transformative process, the teacher must at the very least have consciousness of what the epistemic process is that they are aiming to facilitate and what it means to teach it to their students. Without the ability to do this, the teacher is at risk of not being able to fully and transparently model critical self-reflection of epistemic assumptions. Schlitz et al. did determine that it was possible to teach classroom teachers how to facilitate this process with their adolescent students; they found this through training facilitators and observing the results of how they taught the curriculum in a classroom setting. However, as teachers agreed to participate in a study on the exploration of their epistemic assumptions and worldviews, it is possible that a certain amount of self-selection occurred and that teachers unable or unwilling to engage in this process did not sign up as participants.

The Schlitz et al. (2011) curriculum facilitated teachers and students in the practice of explicitly identifying, examining, and editing poor learning-related beliefs, values, and assumptions. During the WVEP, teachers modeled an exploration of their worldview, or pieces of a commonly shared worldview, with the intention of helping the students to examine their worldviews as a classroom participatory learning experience. Teachers assist students in learning to see contradicting logic while comparing, evaluating, and deciphering unclear

components. Teachers question their own and students' assumptions. Teachers bring awareness to the students' lived, felt, or embodied experience as they are engaging in various components of the learning process. Teachers address limiting worldviews and examine how an individual makes meaning of their personal experiences of the world. Through the teacher's authentic engagement in modeling the WVEP process, the student learns to practice authentic engagement in exploration of their own worldview, thus fostering a cocreated, emerging expansion of awareness into different stages of social consciousness and catalyzing worldview transformation (Schlitz et al., 2011). The curriculum suggests clear questions such as the following:

How do you know what you know?
How is it helpful to consider multiple perspectives?
What does it mean to participate in community?
How do we know when something is true?
How do our relationships help us to see ourselves and the world in new ways? (pp. 7–8)

The results of Schlitz et al.'s (2011) study were gathered from classroom observations, teacher interviews, and both student essays and interviews, all of which were qualitatively analyzed. The researchers found that educating adolescents using the WVEP curriculum does support students and teachers in growing together and navigating classroom activities, which “went from disjointed, teacher-directed exercises to authentic conversations in which students commonly drew connections between different perspectives offered and volunteered their opinions” (p. 15). Student essays shifted from being focused on facts about their lives to topics that concerned or interested them. Another significant finding was that the classroom conversations became self-sustaining

and productive, with students engaged in discussion about complex issues such as racism and sexism. “Students described transitioning from feeling forced to be in class . . . [to] . . . the classroom as a place of choice and a community of learners respectful of one another’s values and differences” (p. 15). Analysis of the interviews and essays demonstrated improvements in awareness of worldview, metacognition, and cognitive flexibility. The researchers “found evidence that students discovered a greater capacity for self-reflection and empathy” (p. 15).

Schlitz et al. (2011) identified that significant contributing factors to a student’s worldview are the beliefs, values, and assumptions relating to the student as a learner and the role of education in the student’s life. These can include beliefs about the student’s unique position in the context of the greater world system, beliefs about how education potentially affects the student’s socioeconomic position in the future, and beliefs around ability to choose options that influence personal circumstances in relationship to socioeconomic position and personal lifestyle. The study results affirm the position of this dissertation that adolescents are able to engage in transformative processes. The researchers believed that the intervention catalyzed whole-person transformation through worldview re-evaluation and restructuring, activated by engaging in critical self-reflection. This research found that students were inspired to see the world through new and less-limiting frameworks discovered through engaged classroom discussion. Identifying, examining, evaluating, and replacing the limiting worldviews challenged students by asking them to sit with or contemplate their own worldviews. They thought about whether or not their worldviews are

authentic to them as an individual, or just embodied as a result of social imprinting.

The findings may have been bolstered by a pre- and post-intervention evaluation using clear measures to track the transformative process. The curriculum itself was not published because it is held as proprietary by the organization that funded the research, and little information was provided toward a clear picture of what transformative teaching looks like. Additionally, no information was provided as to how the facilitators were trained, what materials they were provided with, or how to train other individuals to facilitate the process. However, the published results of the study do demonstrate that it is possible to utilize transformative teaching principles to foster worldview transformation and the development of social consciousness with adolescent students.

CHAPTER 3: RESEARCH METHODS

This research was situated within the context of three overarching paradigms: systems complexity theory, social construction theory, and critical theory. Systems complexity theory aims to understand the panarchy of systems in which life exists and perpetuates, and is the primary paradigm from which the research is approached methodologically. Social construction aids in understanding how individuals that are living within these systems are psychologically constructing self-referential meaning-making systems (worldviews) based on their experiences. Critical social theory supports the conjoining of systems complexity theory and construction theory to locate the processes of transformation in education that free individuals from the limitations of the system and their own self-limiting constructs based on their own knowledge and experiences of that system. To develop this three-part lens, the study employed a participatory transpersonal approach (Ferrer, 2011). Each of these theoretical paradigms is discussed, as is the relationship between them because this dynamic is foundational to choosing the research method. Charmaz's (2014) socially constructed grounded theory has been chosen because of emphasis on studying a process rather than describing a single phenomenon.

Social Systems Complexity Theory

While systems complexity theory was foundationally pioneered through the natural or hard sciences, this lens has more recently taken hold in the social sciences. In consideration of the complexity of social systems, including how social systems relate to the ecological and economic systems, it is apparent that

fostering shifts in students' worldviews across the vast subsystems within public education is no simple task. Two different perspectives have gained significant hold in the relevant literature: one that is grounded in a hierarchical yet holistic realism and relativism (Byrne, 1998) and a second that is rooted in a nested, relational, and multidimensional interconnectivity (Holling, 2001). These two perspectives are discussed to contextualize the significance of studying the systems and processes around the teacher–student exchange in the classroom environment. Historically, the school system has been viewed as a hierarchy, from community, to school board, to administration, to teachers, to students. The term *panarchy* (Gunderon & Holling, 2002) is used to reframe understanding of that historical structure into a multidirectional, multidimensional, living, complex, adaptive system.

Byrne (1998) explained that because of the holistic connection of the smaller cycles of systems within the larger context as a linear hierarchical organization, it is often impossible to derive understanding of the smaller systems when viewed as stand-alone systems; they must be understood within context of the containing systems in which they are situated. Byrne clarified that studying complex social systems is actually a study of the emergent properties of these systems—because the system itself is, at this point in research, still ineffable. The aim of understanding complexity is to “provide the concepts and the techniques necessary for a unified description of the particular, yet quite large, class of phenomena whereby simple deterministic systems give rise to complex behaviors with the appearance of unexpected spatial structures or evolutionary events”

(Nicolis 1995, p. xiii). Byrne's (1998) linear hierarchical systems perspective clarifies the way smaller systems realistically function relative to larger systems to create a holistic and cohesive greater system.

Holling (2001) and Allen, Angeler, Garmestani, Gunderson, and Holling (2014) visualized a nonlinear systems organization that impact in a multidirectional, inter-related dynamic. Holling (2001) explained,

Hierarchies and adaptive cycles comprise the basis of ecosystems and social–ecological systems across scales. . . . Each level is allowed to operate at its own pace, protected from above by slower, larger levels but invigorated from below by faster, smaller cycles of innovation. (p. 1)

If the classroom is taken as an ecosystem nested within a panarchy, this explanation of the interconnectivity between levels of the systems applies to the nature of public education systems within the context of global and local social, economic, and ecological systems. The term panarchy describes the nestedness and interrelatedness of such complex systems so that the traditional concept of a linear hierarchical structure (as used in Byrne, 2001) could be re-envisioned.

Allen et al. (2014) defined the term:

Panarchy is different from typically envisioned hierarchies in that control is not just exerted by larger-scale, top-down processes, but can also come from small scale or bottom-up processes. Additionally, the dynamics of renewal and collapse within-scale domains, that is, adaptive cycles differ from the more static view of traditional hierarchy theory. Because of the potential for cycling within adaptive cycles to affect both smaller scales and larger scales, panarchy theory emphasizes cross-scale linkages whereby processes at one scale affect those at other scales to influence the overall dynamics of the system. (p. 1)

Viewing systems in this multidimensional model provides the space to account for the many variables that are easily overlooked when understanding an existing lived process. The dynamic points of interconnection within the panarchy of a

complex system were conceptualized through three iterations, and ultimately three functions: bifurcation points, leverage points, and transformation points.

Byrne (1998) outlines a particularly significant concept that supports and bolsters Holling's (2001) explanation of complexity in systems as a panarchy. Each theorist uses a different term and slightly different description to define a similar point within the causal conjunctions between systems. Byrne (1998) refers to mathematics to define what are called bifurcation points. In the linear mathematical equation (the equation is the system), the givens of the equation are impacted by a single or knowable number of variables to determine the predictable answers to the equation dependent on the known variables, or the logical trajectory of the system—the changes in the system correspond to the changes in the variables. However, in nonlinear equations (or an open, nonlinear system) with an unknown number of variables or varying directionality of impact resultant from the unknown variables (such as logical if-then statements), it becomes much more challenging to determine what conditions in the system perpetuate different corresponding consequential phenomena in some related system or aspect thereof. It is within bifurcation points that the conditions are created to determine the trajectory resulting from variables being changed or introduced to the system. Byrne explained that these are points in the complex system of systems where transformation occurs, either impacting the system of which the change happened in or through output of phenomena impacting an aspect of the higher, containing system(s).

A distinction in the complexity can be discerned when viewing Byrne's (1998) work on the concept of a transformation point through the panarchical lens that Holling (2001) and Allen et al. (2014) provided. The bifurcation points in a panarchy model are not connected in a linear direction, and could potentially be multidirectional. This creates transformation points that move in any direction or multidirectionally, as singular points or inter-reactive, inter-responsive chains. Push or impact may flow from a multitude of systemic conditions, or variables, which were inherently at another moment the trajectory of some other transformation point. This model posits that it is in fact an interconnective web of systems—like the real-world ecological, social, economic, and education systems—that are unconditionally codependent upon each other regardless of the human capacity to perceive the flow and dynamic of such connectivity, or the resultant perpetuating evolution, sustainability, and perhaps a lack thereof.

Holling (2001) picks up this line of reasoning on transformation points in discussion of leverage points. If the bifurcation points within a system are constituted of known and manipulatable variables, then, it is through impacting and conditioning the variables that Byrne's (1998) bifurcation point becomes Holling's (2001) leverage point. Although it is nearly impossible to understand all of the complex variables that constitute a social interchange, there are certain social situations where many of the variables are known and can be manipulated to foster a particular response in the systems. This is evident through examples such as social media, propaganda, marketing, and politics.

Systems in the panarchy are “interlinked in never-ending adaptive cycles of growth, accumulation, restructuring, and renewal” (Holling, 2001, p. 3). Thus through understanding these adaptive cycles and the impacting variables, it is possible to learn where the system is open to positive change and where it is vulnerable. “It then becomes possible to use those leverage points to foster resilience and sustainability within a system” (p. 3) or a set of interconnected, interrelated, interimpacting nested systems.

Both Holling (2001) and Byrne (1998) agree that the concept of bifurcation or leverage points are “transformation points” (Byrne, 1998, p. 22) that become so “on the basis of very small differences in the values of controlling parameter(s) at the point of change” (p. 22). The impacting variables that create the conditions for the trajectories of such transformation points in social systems are often the socially constructed worldviews of the human participants present in the conjunction point, including economic and ecological variables. It is important to understand the many varieties of potential variables that impact student–teacher exchanges that result in a process of worldview transformation, so that methods and techniques can be promoted to support removing limitations in the student’s (and presumably the teacher’s) learning-related worldviews.

Construction Theory

Construction theory makes it possible to examine the components that impact the multiple levels of systems that come together in the teacher–student relationship; although an exhaustive analysis is beyond the scope of this research proposal, it is important to clarify what this means for the purpose of this project.

Boghossian (2001) explained that social construction of knowledge can be considered on two levels: the metaphysical claims that argue about the ontological nature of reality and the “epistemic claim that the correct explanation for why we have some particular belief has to do with the role that that belief plays in our social lives, and not exclusively with the evidence adduced in its favor” (p. 2). This research is specifically focused on learning about the process or systemic structure through which individuals understand the epistemology of their socially constructed meaning-making systems. This inner worldview system reflexively limits or fosters the healthy development of self-efficacious worldviews that promote sustainable, equitable living systems.

Fosnot and Perry (1996) said that psychological construction theory examines an individual’s worldview through the behavioral, emotional, developmental, or cognitive manifestations of the socially constructed meaning-making system. They continue to explain this does not mean learning and development is a mechanistic process that can always be put together with orderly and even plans that guarantee a specific outcome; it is not like a mathematical equation. Constructionism is a psychological theory, “one that construes learning as an interpretive, recursive, nonlinear building process by active learners interacting with their surround—the physical and social world” (p. 23). Through the individual’s interactions with both internal and external systems, the worldview becomes an interface, the point in which transformation occurs between social, psychological, and other types of systems.

Thommen and Wettstein (2010) explain that it is necessary to consider the construction of each individual's worldview, both socially and psychologically, because "it is always a specific system, capable of recognition and knowledge, that performs perceptual and cognitive processes and thus differentiates itself from its environment" (p. 219). It is through this differentiation from the environment that the individual constructs their position and responds to the learning exchange in a unique way. Thus, it is a challenge to develop techniques for guiding the processes of transformation points toward learning, sustainability, and positive development because each exchange is so unique. These learning exchanges are what Eun (2010) explains as socially constructed events in which the student is required to consider new perspectives and viewpoints that shift how the student understands the event, impacting how both the student and teacher in turn engage in subsequent exchanges as a result of shifts or changes in their own socially constructed worldview or self-referential meaning-making system.

Transpersonal Theory

These learning exchanges can be better understood through the lens of transpersonal psychology, defined by Hartelius, Rothe, and Roy (2015):

Transpersonal psychology is a transformative psychology of the whole person in intimate relationship with a diverse, interconnected and evolving world; it pays special attention to self-expansive states as well as to spiritual, mystical, and other exceptional human experiences that gain meaning in such a context. (p. 14)

The transpersonal perspective looks at how individuals reach beyond the structure of their own self-referential meaning-making system to integrate new information presented in the learning exchange, thus transcending themselves and removing limitations in their own worldview. Ferrer (2011) explained that it is within such

exchanges that transpersonal phenomena occur, when value for what has been learned arises through the relationships between individuals or groups devoid of pre-established hierarchy: “the events’ emancipatory and transformative power on self, community and world” (p. 1) then validates the learning experience. The transpersonal perspective recognizes that all members of the process participate as equals, which develops “cooperative relationships among human beings growing as peers in the spirit of solidarity, mutual respect and constructive confrontation” (p. 3).

Walsh and Vaughan (1993) outlined common techniques for accessing these transpersonal phenomena and describe them as “part of an art and technology that has been refined over thousands of years. . . . This is the art of transcendence, designed to catalyze transpersonal development” (pp. 1–2). Transpersonal phenomena are not limited by any particular philosophy or worldview, but are enriched by utilizing the transcendent practices and teachings of world religions such as attention training, refining awareness, and emotional transformation (Walsh & Vaughan, 1993). Walsh and Vaughan’s work highlights how the transpersonal can be accessed through the great variety of worldview systems that have developed over the course of history to foster transformation of the self through a practice and skills-based education. The techniques used to access the transpersonal are examples that provide educational processes that foster holistic growth rather than just informational understanding, which in turn positively impacts multidimensional levels of learning within the individual’s psychological and social meaning-making system.

Ferrer, Romero, and Albareda's (2005) participatory and integral transformative education provides a frame for how to approach the teacher–student exchange; it is broad enough to hold and account for the multiplicity and diversity in perspective and perception of individual experiences. This lens agrees with Schlitz et al.'s (2010, 2011) research that suggests students transcend or overcome limiting worldviews through engaging in experiences that highlight the relationship and differences between their own worldview and the other participating members of the process, such as their peers, teachers, or the academic materials. The transpersonal participatory approach is not a way of limiting options for philosophical construct and understanding, but a way to delimit and explore relationships between the many existing structures that cannot be arbitrarily proclaimed as wrong or inaccurate based on personal preference. The participatory approach is significant in its capacity to hold ambiguity and multiplicity. Implementing the participatory approach to understanding the classroom system highlights structures surrounding exchanges that support holding conflicting viewpoints of the same instance and a variety of relationships originating in many directions. This highlights complicated dynamics that cannot be seen except through the results of social exchanges, demonstrating that each individual or component of the system are all equal participants in the manifestation of these exchanges.

Critical Theory

Critical theory emphasizes the importance of each individual understanding their own worldview so that they can be liberated from their own

self-imposed limitations. Horkheimer (1982) described a theory as critical insofar as it tries “to liberate human beings from the circumstances that enslave them” (p. 188). In an effort to support the liberation of teachers and students from the circumstances of the education system that perpetuate limitations in worldview, it is essential to understand the process of the teacher–student exchange as a transformation point that is experienced by the participants in the exchange. Understanding these underlying patterns allows for developing a model that can be a guiding principle for increased health, sustainability, transparency, happiness, and peace—the objective of critical social theory. Thommen and Wettstein (2010) explained, “systems theory conceptualizes the different types of systems as functioning autonomously but being structurally linked, without the subordination of one system to another” (p. 230). Although it may be theoretically true that the systems are not in subordination to one another, critical theory examines the extent to which human social, psychological, and cultural development have instilled imbalances of power into the systems. Gibson (2010) highlights that critical theory examines the underlying imbalance of power that perpetuates limitations resulting in human suffering. Critical theory perspectives ask for examination of the way students are taught to understand the underlying power structures and impact of limiting worldviews that are variables to interactions within the socially constructed psychological and societal rules and norms within the greater panarchy of systems. Along with critical social theorists, overcoming these limiting circumstances that are socially constructed by the greater system of individual worldviews is called for and supported by researchers

(Roeser et al., 2002; Dweck, 2006), theorists (Slavich & Zimbardo, 2012), and policymakers (Partnership for 21st Century Learning, 2015). Consider individuals who live deeply submerged in a closed or isolated social or cultural group: these individuals may not realize they could choose to examine or change their worldview, regardless of the limitations of that worldview.

Brookfield (2000) called for the use of critical reflection to make apparent the power dynamics and relationships that are hidden beneath the surface of social and cultural functioning. Utilizing social and self-reflection is a major component of critical social theory. Kreber (2012) explained that adding the concept of critical to reflection or contemplation connects the reflection to examining social, political, and ideological principles. Cross (1991) and Helms (1984, 1990) demonstrated that individuals who regularly experience being in the disempowered role in a social dynamic are often more aware of their social positionality. Critical reflection aims to loosen the hold of hegemonic assumptions that are often accepted by the individual or group in the disempowered position as a worldview that is in their best interest. In reality these assumptions are working in favor of those in the empowered position of the social dynamic. This is true when an individual in a less-socially-empowered group buys into worldviews spread by a more-socially-influential group in order to maintain power, such as “all poor people are lazy and stupid”; “all girls are bad at math”; “my parents don’t work so I won’t need to work either”; “boys don’t cry”; or those that perpetuate propaganda.

A need for this critical lens was supported by transpersonal philosophy. Ferrer's (2002) critical analysis of reductionist perennialism offered a vision for participatory emancipation through an epistemological framework that considers the nature of transpersonal phenomena.

The epistemic dimension of transpersonal phenomena [appears] fundamental for understanding their nature and emancipatory power: What makes transpersonal phenomena distinctly "transpersonal" (as well as interesting, provocative, and transforming) is not their nonordinary or occasional ecstatic character, but the character of the knowledge they provide during an expansion of individual consciousness. (p. 9)

Ferrer proposed that emancipation is facilitated by the individual engaging in participatory meaning making through the experience of, and critical reflection upon, epistemic dimensions of the transpersonal phenomenon. In transpersonal education critical reflection is emancipatory because the experience itself challenges epistemological foundations, thus expanding consciousness.

Vaughan (1982) pointed out the significance of the organic nature of the transpersonal field in that it does not rally behind a particular perspective or dogma. This has allowed the transpersonal education movement to become focused on promoting common concerns, purpose, and the development of a vision with "human beings as equal participants and co-creators of our reality" (p. 38), regardless of the student's background. Transpersonal education requires that the students and the teachers work together as a classroom community, to develop "awareness of our capacity for self-determination, self-actualization, self-realization, and finally self-transcendence" (p. 38). Vaughan's understanding of a transpersonal education asks the teacher to encourage the student to remain an independent individual as they learn, not becoming reliant on a particular theory

or paradigm as a sole source of direction. The transpersonal method holds that learning takes place when constructed meaning is drawn from a variety of sources and experiences. Students are then supported in learning through developing relevant connections to their own lives, promoting integration of new understanding into the individual's already existing perspective of the world, or their worldview. Vaughan reflected that the teachings of the mystical traditions recognize the source of wisdom is within each of us. Wisdom is able to authentically develop out of the integration of experience and knowledge, becoming part of the individual's spirit or greatest sense of self. The transpersonal lens studies a variety of traditions and encourages the individual to use their own inner knowing. In aligning with transpersonal philosophy, participants were asked to use their own constructed meaning to share their teaching wisdom.

Goal of Study

The goal of this research was to first critically analyze the teacher–student–environment transformation points as situated in classroom, school, and social systems; then, to propose a pedagogical grounded theory model for what transformative teaching looks like in a way that could be pragmatically applied to praxis in the classroom. A greater aim was to promote mental emancipation for future students, teachers, and individuals by producing a comprehensive, socially constructed, midrange grounded theory that explains how teachers model a worldview transformation process through exchanges with their students, which fosters socially, ecologically, and economically conscious transformative mindsets.

This research asked participants to describe patterns of exchanges with students during which the teacher had the ability to initiate or guide in some way the outcome of the exchange. This project was designed to follow Thommen and Wetstein (2010) analysis, that by recognizing “structures as regular patterns of processes occurring in time” (p. 216), it would be possible to view the structure of the classroom social system as the very processes that happen repeatedly in exchanges between the teacher, the students, and each other. The processes of the exchanges define these complex systems, and how each comparable exchange develops or evolves over time. The exchange points are the same as leverage, bifurcation, or transformation points discussed above. Each exchange between a teacher and student or students and their peers or the student and the entire classroom environment are each a transformation point with potential to change the system or the individuals (with their own personal socially constructed system of their worldview). These points are impacted by the multidimensionality and variability of the worldviews brought by the students and teachers with them from their own lives into the classroom environment. Each individual’s worldview, or expression that originated in the meaning-making system, is constituted by a number of variables far too great to control or predict.

Limiting worldviews negatively impact the transformative process by preventing the individual from developing an evolving and sustainably growth-oriented, inner meaning-making system. When these limiting worldviews can be exchanged for healthier, positive, self-efficacious worldviews, thus transformation occurs in both the individual and the systems the individual impacts. The goal of

this research study was twofold. The aim was to understand, first, what do these transformative moments look like when they are actually happening in the classroom? Second, how is the teacher pedagogically developing and fostering transformations in their adolescent students' worldviews?

Consideration of Method: Grounded Theory

Byrne (1998) pointed out that it is not enough to model the process, as it is already happening, through an abstraction; it must be developed through concrete knowledge and experience of the real-world system. This points to the large gap that often exists between theory and practice, particularly in education-related methods. To address this, the research adhered to Mertens's (2010) perspective that grounded theory is the most appropriate method for closing this gap.

Charmaz's (2014) iteration, socially constructed grounded theory, was used as the method for data collection, analysis, and theory building.

Charmaz (2014) described grounded theory as a data-driven research method where puzzle pieces are added and new puzzles created altogether through continually going back and forth between data collection and data analysis. In education research, developing theory that is inherently connected to real-world situations is essential to the pragmatic application of the findings. Mertens (2010) suggested that grounded theory would provide opportunity to stay present with the real-world situation and could result in a more pragmatic application of the theoretical model being developed. The social constructionist lens Charmaz (2014) described aligns with the systems theoretical frame put forth above, and thus it was certain Charmaz's method was the most appropriate for

this study of multidimensional unfolding processes occurring at a broad intersection of many socially constructed worldviews, and impacted by unquantifiable variables.

Operational Definitions for Recruitment

This study intended to explain the process of transforming limiting learning-related worldviews of students as a result of teacher–student exchanges within the classroom environment, as it was already happening. The purpose of the study was to understand what the process itself looked like within the SFUSD public school system, rather than defining the term. Schlitz et al. (2010) defined worldview transformation as

a fundamental shift in perspective that results in long-lasting changes in people’s sense of self, perception of relationship to the world around them, and way of being . . . Transformation involves epistemological changes in how they know what they know. It is not only behaviour that changes, but also the motivational substrate from which that behaviour arises. It is not only a change in what people do, but also in who they understand themselves to be. (p. 20)

The study was seeking to work with classroom teachers and credentialed support staff members that excel in fostering transformation in limiting learning-related worldviews. It was thought that this may have looked like social or emotional development and consciousness, work–study habits, problem-solving skills, or efficacious learning-related beliefs, attitudes, and values. The phrases social development and work–study habits were adopted from the SFUSD (2015d) Standards-Based Report Card; the terms were used to evaluate the amount of growth in learning-related worldviews as manifested through the student’s social and academic behavior. Roeser et al. (2002) and Slavich and Zimbardo (2012) identified efficacious learning-related beliefs, attitudes, and values as the goal of

positive worldview transformation (i.e., transformative learning) in adolescent students. Mezirow (2012) and Kitcher (2012) identified complex problem-solving abilities as the level of cognitive capacity required to participate consciously in transformation. Schlitz et al. (2010) offered their model of the five nested levels of social consciousness (discussed in Chapter 2: Literature Review) to explain the process an individual internally experiences as they go through worldview transformation. Conversely, participants may have very different language for and understanding of the concepts and other related aspects that may have not been considered in the brief literature review of this document.

Research Proposal Approval Process Through SFUSD

Before beginning to recruit participants or conduct research, approval of this research proposal was obtained through submission to the California Institute of Integral Studies Ethics Review Board (ERB). At the time of proposal ethics approval in February 2016, I held the position of Resource Specialist Professional at an elementary school. A supervising principal had often engaged in discourse with me while developing the proposal, and initially directed me to the supervisor of the SFUSD Department of Research Planning and Accountability. The supervisor provided a standard document with the district's research guidelines and application procedures to ensure understanding of the steps for submitting proposed research to the school district for approval. The proposed research was submitted upon receiving ERB to be considered for the school year of 2016–2017. There were five categories of documentation that were submitted with the proposal. These were (a) Application to Conduct a Research Study in SFUSD, (b)

Request to Administer a Survey, Interview, or Other Assessment in SFUSD, (c) Request for SFUSD Administrative Data to Use in a Research Study, (d) Criminal Background Check, Subsequent Arrest Notification, Tuberculosis Clearance Certification, and (e) other supporting materials such as ERB, letter of intent, and proposal document. However, as I was a district employee, I did not need to submit part (d), as this approval has already been completed as part of district employment. The SFUSD research guidelines stated that projects are more likely to be approved when they require low resources on the part of the district and that the conclusions of the study are likely to have a positive impact in the areas of the district's six priority strategies. The ways in which this study fulfilled the six priority strategies can be found in Chapter 6: Discussion. Care was taken to ensure that the collection of data required very low effort on part of the district. This research project was accepted by SFUSD, and approval was given April 2016 (Appendix A) to begin recruiting participants in August 2016.

Screening Procedures

Once approval was received from SFUSD, the recruiting method from Cranton and Carusetta (2004) was followed. Cranton and Carusetta “reasoned that if knowledge about teaching is primarily communicative in nature and therefore socially constructed by a community of practitioners and scholars, then [one learns] about teaching through experience, reflection on experience, and dialogue with others” (p. 6). In their study, Cranton and Carusetta asked for nominations of teachers that fit their criterion: being an authentic teacher according to the perspective of other school colleagues who are familiar with the

teacher's work. Cranton and Carussetta interviewed teachers with many and few years of experience, a variety of subject areas being taught, and across a range of difficulties.

Inclusion and Exclusion Criteria for Participation

Using Cranton and Carussetta's (2004) selection method, participants were recruited based on recommendations by SFUSD credentialed employees via nominations from principals, teachers, support staff, and other participants. The inclusion criterion for participants was nomination by SFUSD colleagues, based on fitting the definition of transformative teaching, as provided above in the operational definition for recruiting, defined on the recruiting flyer (Appendix B). Participants with many or few years of experience teaching were eligible, as were variety of subject areas being taught, across a range of ages and difficulties of student population. To develop a more complete picture of transformative teaching processes, other credentialed school employees such as academic coaches, principals, or special education teachers were included as potential participants because they are often expert teachers with many years of experience or are working as a specialist focused specifically on improving teaching and learning or the school environment. Additionally, it was thought that these individuals would be able to provide dimension to the perspectives on the processes described by participants, offering another level in understanding of how the teacher fosters worldview transformation in the classroom.

Thommen and Wettstein (2010) said that the teachers act as first-party observers of their own experiences. Teachers become second-party observers

when describing their experience of the students' growth and transformation, and third-party observers when the teacher is describing what the students' experiences seem to be. In this way participants had to be enthusiastic to act as coresearchers. Participants needed to be willing to reflect in examination of their teaching experiences from a multidimensional perspective. Participants needed to be ready to authentically engage in examining the bias in their own worldviews, compared to events as they unfolded in the classroom or school environment.

To truly understand the processes involved in transforming limiting learning-related worldviews through the teacher–student exchange, it would be ideal to have the teacher, student, and other stakeholders provide first-hand accounts to triangulate the same transformational instance. However, students were not interviewed as part of this research due to challenges in accessing the student population for research, and such research would have been of a much larger scale. Teachers working in third grade or below were not considered unless they had experience with students in higher grades, because of the controversy surrounding age of readiness for engaging in transformative learning, which is discussed in Chapter 2: Literature Review. Other exclusion criteria were not required because the purpose of the study was to see what transformative teaching looked like according to SFUSD credentialed teachers and staff.

Recruitment Protocol

Recruiting began in August 2016. Each of the 21 middle and 17 high schools in SFUSD were contacted by email for participation. The initial contact was made directly to principals and, when possible, again through personal

introductions or approaching them in person. Each principal was provided with the recruitment flyer (Appendix B), executive summary (Appendix C), and the operational definition of worldview (Appendix D). Principals were often very busy; I found that emails were sometimes successful, while showing up in person was quite a bit more effective. The principals (and participants) were offered an opportunity to review the full proposal if they wished, although only three individuals did so.

In the fall of 2016, four administrators agreed to have an in-person discussion to learn about the study. After meeting with the school principal, I was allowed to attend two school-wide faculty meetings to briefly review the research executive summary, answer questions, and recruit participants through nominations by their colleagues using the online survey (Appendix E). Additionally, the other two principals agreed to allow the online survey to be sent out to their school faculty. The survey was created using the Survey Monkey website to anonymously collect nominations of credentialed employees whom were believed to meet the criterion for the definition of being a transformative teacher, which was outlined in the online survey. The remaining principals consented their schools' participation during brief, unscheduled, in-person meetings at the school site. Ultimately, 10 schools consented for individuals from their site to participate in the study. Individuals completing the survey were encouraged to share the nominations website with their SFUSD colleagues and to nominate individuals from other school sites, which is probably how individuals from the other school sites had been nominated

One hundred and twelve nominations were submitted through the online survey, from 14 middle and high schools. This list was destroyed upon completion of recruiting because it contained personal identification information, and was kept private during the recruiting process. The individuals most nominated from each school site were approached and asked if they would be interested in participating in the study. The 30 individuals (from 10 schools) who participated in the study were chosen first based on having been nominated multiple times; then, on the willingness of the individual to respond and participate in an interview (see Inclusion and Exclusion Criteria for Participation section above). There was no further screening process, as participants were screened through the nomination process.

Initially, participants were contacted through email communication (Appendix F: Sample Initial Contact Communication). However, there were several individuals with high nominations that did not respond to email. In these instances, I went to their school site and found them in person to offer an invitation to participate in the study. Potential participants were informed that their colleagues identified them as a teacher who is believed to embody transformative teaching. They were told the goal of the study was to learn from their teaching practice and methods, in conjunction with other participants, to develop a process model demonstrating what transformative teaching looked like as it was already happening in their everyday lived experience. Twelve nominees that were contacted either declined or were not available to participate at all or until after it was determined that sufficient data had been collected. Several

declining participants believed they were not an adequate person to interview, while one believed their colleagues put the researcher up to it for a funny joke. As was expected, some nominees declined due to convenience and their own self-perceived incompetence. Individuals who only received one nomination were not contacted.

Data Collection Procedure

Interviews

The interviews were entirely completed by March 1, and all transcriptions finalized by March 20, 2017. Interviews were arranged by email or in person after the participant had the opportunity to review the recruiting flyer, executive summary, and operational definition of worldview as related to transformative teaching. The participants were also emailed the Informed Consent and Bill of Rights (Appendix G), and Confidentiality Agreement (Appendix H) for their review before the interview. The participants were able ask any questions regarding the study by phone, email, or in person before and on the interview date. The participants were invited to review the full proposal if they wished; only one accepted the invitation. Interviews were mostly conducted in the participant's classroom at a time that was convenient for the participant. Some interviews were held in their office or in a location at the school that they preferred. In some circumstances the interviews were conducted in a café, dependent on the participant's preference. There were no phone or written interviews. Before beginning the interview, the informed consent, bill of rights, and confidentiality

agreement were reviewed and signed. Any remaining questions the participant had were answered.

A semistructured interview protocol (Appendix I) was followed to facilitate a conversation in which the participant was asked to share wisdom, experiences, and critical self-reflections regarding the research question. The interview questions were adapted from several pieces of research reviewed in this study, as well as from conclusions I drew as a researcher. Thommen and Wetstein (2010) provided specific questions for developing a research protocol when studying the transformation point of the teacher–student exchange. They suggested that it is essential to focus on the process of the exchange between the teacher, the students, and the classroom environment as a lived experience instead of personal traits or potential explanations of composition from past narratives. Questions were also derived from Roeser et al. (2002), Slavich and Zimbardo (2012), Schlitz et al. (2010), and Schlitz et al. (2011).

Participants

Mertens (2010) advocates for prolonged and persistent engagement with the data when using grounded theory, which was followed until after saturation of data was reached. Mason (2010) emphasized the concept of data saturation as the determining factor for how many participants are involved in a qualitative study. However, through analyses of 560 qualitative PhD dissertation studies, Mason found that the mean sample size was 31 participants. To adhere to Mason's findings, it was planned that in this study, interviews would be conducted until saturation of data became apparent or 36 participants were interviewed,

whichever came first. During data collection, when 26 participants had been interviewed it seemed that saturation of the key concepts had been reached. Several more interviews had already been scheduled, which were conducted to honor these remaining participants and add depth to the data. The recruiting process was finalized after conducting 30 participant interviews.

Demographics

At the time of the study, all participants held a valid California credential for their teaching position. All participants were full-time employees of SFUSD, although they did not all live inside of the city of San Francisco. Participants ranged in number of years they had been working in education from one year of previous experience to over 30 years of classroom teaching. At the time of the study, participants were teaching a range of subjects including math (five), English (six), social studies (six), art (two), and science (five). Most participants had also previously taught in different subjects or grades than they were teaching at the time of the interview. Four participants were resource specialists with the special education department. Four participants were teaching AP-level courses. Three participants were full-time administrators; two were academic coaches or specialists. Seven held a mixed teaching and coaching, mentoring, or administration position. Seven participants worked in middle schools, 22 worked in high schools, and one worked in both middle and high schools. Three participants were Asian; five participants were Black; five participants were Latinx; 16 participants were White; and one participant did not identify. Eighteen participants identified as heterosexual; eight did not identify their sexual

preference; and four stated that they were gay or lesbian. The participants included 17 women and 13 men. Seven participants identified as single; 15 said they were partnered; and eight did not reveal their relationship status. Nine participants identified that they could speak to students in a language other than English.

Researcher as Participant through Insider Status

For the years from 2014–2016, while preparing the proposal of this study, I was a resource specialist with SFUSD K-5 schools, mostly in bilingual dual immersion Spanish–English classes. For the school years from 2016–2018, I was a resource specialist, case manager, and coteacher with an SFUSD high school and it was through these relationships that the recruiting process was ultimately driven. I hold a current clear credential in Mild/Moderate special education; a Crosscultural, Language, and Academic Development certificate; and an Autism Spectrum Disorder authorization. I prefer teaching subjects like physics and algebra to English.

Thommen and Wettstein (2010) discussed that the researcher must be, to a certain degree, familiar with the processes being examined, or they will be unable to ask useful questions or understand the language specific to the topic. At the conception of this study, I had taught in schools in New York, Philadelphia, Austin, and the Bay Area, but did not consider myself a master or expert teacher in any way. This insider status provided an opportunity to understand the expertise of the participants from both a position of having relevant personal experience and a beginner’s mind full of curiosity. I am knowledgeable of school

policies and curriculums, and thus felt able to understand the data that indicate a participant's unique teaching style, techniques, and processes, rather than the school and district's administrative organization. My insider status as a teacher provided context for understanding difficult-to-explain or unique-to-SFUSD aspects of the participants' experiences. This did make it easier to explore the topics together as coresearchers, navigating through the participant's interpretations of their experience. I was able to take unfamiliar ideas from participants into the classroom, suddenly seeing new ways to approach working with students or to organize a lesson in my own practice. Through praxis, I would then be able to understand more deeply when a subsequent participant interview returned back to the emerging concept. Thus, I was able to ask better questions to gain more depth and robustness about ideas I had not understood well in the previous interview. The time spent teaching while conducting the interviews and analysis was invaluable to articulating the findings and discussion of this research.

Handling of Data

Interviews were conducted in person and recorded using an audio recording device. The audio files were downloaded to a private computer and saved on an external hard drive, both of which are privately password protected. The external hard drive and other data are stored in a locked cabinet in a private home office which cannot be accessed without a private key. The audio recordings and all data will be saved until the research project is completed, which may extend past completing the dissertation. If requested by the participant, at that time their data will be destroyed for confidentiality.

The transcription process was completed by the end of March 2017. The first eight interviews had been transcribed in a group before conducting more interviews, and then each subsequent interview was transcribed as soon as possible after taking place. Following the technique developed by Brooks (2010) known as “embodied transcription” (p. 1227), each interview was transcribed using the program Scribe to slow down the audio and Dragon Dictate to verbally transcribe the interviews. Caution was used with interpreting the interviewees’ meaning when the audio is at a slowed rate, as it could have changed the emphasis of the interviewees’ speech patterns. After the transcripts were written, the audio was reviewed at regular speed to make notations of any information that may be relevant such as tone, speed, or emotion, and to ensure the transcript conveyed the same meaning as the audio recording. Initials were chosen in place of pseudonyms and were assigned to each participant. The key to linking identities and initials are stored separately from all other records.

Analysis of Data

Charmaz (2014) suggested taking ample notes (see Appendix J: Photo of Note Taking), with the purpose of tracking steps taken on the larger process level, thoughts or feelings during interviews, reflections on the interviews, and also memos in the analysis process for each round of interviews (see Appendix K: Photo of Interviews with Codes/Notes). Notes were taken during the interview to track gestures, references, inferences, or emphasis that may not have been apparent in an audio recording, as well as relevant insights being put together while reflecting on the interviews. These notes became data too.

Charmaz (2014) provided nine strategies that grounded theorists use during analysis of the research, which were followed as closely as possible in the analysis process of this study. The first strategy identified by Charmaz is that data collection and analysis is an iterative process, which means that the first interview should be conducted once the individual has agreed to be a participant, and analyzed immediately after. The second strategy provided by Charmaz is that the focus of interview data analysis is to code for processes and actions (verbs) rather than themes and topics (nouns). By focusing on what the teachers were seeing and doing to connect with their students, on what the teacher thought was the common variable that kept learning happening, it was easier to use the data to put together a refined picture of what transformative teaching looks like. Constant comparison, Charmaz's (2014) third strategy, needs to be done between data and data, also between data and emerging concepts. In this fourth strategy the data are used to develop emerging conceptual categories. The research protocol is to be updated and revised as the interviews and data analysis are conducted to ensure that the emerging conceptual categories become more saturated through the interviews. Constant comparison of both new and previously collected data help to guide the identifying processes and actions that were emerging from the data to begin the formation of a theory (Bryant & Charmaz, 2010; Charmaz, 2014). Constant comparison was particularly important when a significant concept emerged during an interview that provided the key missing piece in an area of the puzzle that had yet to be worked out, and by going back to previous notes and data, the new concept could become part of the theory rather than overlooked.

Charmaz's (2014) fifth strategy requires that multiple levels of systematic data analysis, and analysis of the data analysis, are compared back to the original data sets. The sixth strategy is to avoid any description or application of current theories in favor of developing novel theory directly from the data. The seventh strategy is theoretical sampling. For aspects of a research process that needs deeper understanding, Charmaz suggested focusing on the data by using theoretical sampling after identifying new aspects of the theoretical process. While collecting data, it became clear that concepts were emerging relevant to the research question. The subsequent interview then focused in greater depth emerging concepts, and working to gain greater clarity in the ideas that are coming together through analyzing the data. The emerging concepts were developed while still maintaining openness to other ideas that may have arisen in the data. Charmaz's (2014) eighth strategy is to constantly be looking for variations and divisions within the categories to develop more refined and specific categories and concepts. The final strategy identified by Charmaz's grounded theory is that developing an emerging category takes precedence over developing a specific empirical topic. The pieces of the theory were arranged together as concepts that emerged from the data to create a more cohesive picture that became more clearly rooted in the exchange points of the teacher–student relationship.

Coding Interviews

The formal coding process began with a first reading of each interview, with sections that jumped out highlighted using different colors for different

chunks of meaning with minimal notes. A second round of reading each interview was completed, making notes in the margins and labeling chunks of meaning with identifying codes; no codes were predetermined. A third reading was done to tie back any ideas that had been developing throughout the first two readings, making notes in the margins and taking down memos on a note sheet, codifying remaining parts. Each interview was reviewed in-depth; color coordinated sheets of codes were created for each individual interview, resulting in approximately 3,600 initial stand-alone codes (see sample in Appendix L: Photo of Code Sheets). These sheets of codes were aggregated using a color coding system that identified which particular codes came from which interviews, by creating a color organized list of codes with numbers of the interview underneath each codes, while collapsing codes for redundancy and overlap. This process resulted in approximately 300 condensed codes.

Developing Categories

In vivo codes, process codes, and emerging concepts were noted into the color organizing system, including memos to preserve meaning, to ensure they could be specifically used for data presentation (Appendix M: Photos of Collapsing Codes Sheets). After being photographed for documentation, these sheets were cut down into strips and reorganized until they were arranged into 24 categories (Appendix N: Photo of Developing Categories), which were subsequently divided into five themes (Appendix O: Photo of Codes/Categories Broken Down into Themes).

In writing the description of the data, the strips of codes and related memos were used to create the description of each category, and a color–number organization process was used to track and cite which bit of data came from what interview. These bits of data, through codes and memos, were integrated to weave a picture of what transformative teaching looks like, directly from the data. Each idea that appeared in many interviews is cited as such by listing the pseudonym initials of the interviewees in parenthesis, and when a slightly different but useful idea or aspect was noted, multiple participants were listed to attribute what went into developing the fullness of the concept. Quotes were selected as exemplars of important ideas, particularly in more saturated categories. Some of the categories were constituted by a large portion of direct descriptions by the participants reflecting on their experiences, who were able to articulate concepts in completion. Conversely, parts of categories were constructed from syntheses of in-vivo codes, or combinations of more well-elucidated components from various interviewees. Maintaining participant confidentiality while carefully tracking attributions was the single most challenging aspect of this project. Awkwardness regarding participant identity and attribution can be credited to concerns over confidentiality; this tenuous balance does not feel like a completely resolved issue.

Data Quality Evaluation

Mertens (2010) outlines four significant categories for evaluating the quality of data and research in qualitative studies. This study was conducted from the constructivist perspective, so rather than positing there is an absolute truth to

measure the accuracy of this study in comparison to, the quality of the data is ensured through careful documentation of processes, including data collection, analysis, interpretation, and subjective thought development belonging to the researcher. The following is how Mertens's four categories—credibility, dependability, confirmability, and transferability—were applied in this study.

I have been working and volunteering in public education settings since 2006; this background has provided ample opportunity for me to become familiar with the set and setting surrounding the research problem. My own long-term engagement with public education acted as a guide for determining if a sufficient and accurate picture of the transformative teaching process had been ascertained. At the outset of the project, the I felt strongly that I personally did not know the answer to this question. My ability as the researcher to apply the emerging concepts and processes in my own teaching practice supported my decision that I had engaged sufficiently with the research data. I spent one school year collecting and organizing data. Then I spent the school year following truly synthesizing the data and applying the findings to my own classroom teaching practice. This process enabled me to better understand concepts that had been unfamiliar to me as a teacher before concepts began emerging in the data.

Member checks were conducted by asking participants to review the categories as they were emerging from the data. Participants helped to verify and refine the developing theory to ensure that it aligned with their own lived experiences. Gibson (2010) explained that this step is essential to accommodating critical theory when using grounded theory as a methodological approach,

By promoting this reflection [by the participants] it is argued that the solution to these practices could only come from participants themselves. This point is crucial, to what extent is it possible to generate a theory on a core problem that might not be shared by participants and then to have the solution to that problem based on the consensus of the participants as part of the study? (p. 441)

The participants in the research were essential to understanding the pragmatic application of the processes involved in transforming limiting learning-related worldviews. The participants engaged with their past experiences through reflection during the interview, over which the research engaged in dialogue about the emerging theory. Mertens (2010) said this participatory aspect creates greater clarification and development of the emerging concepts, more detailed understanding of the developing model, and helps the teacher-as-researcher “make better-informed decisions about daily operations” (p. 238). This approach supported developing robust findings by offering participants opportunities to refine their ideas in light of ideas I had learned as a researcher from participants.

An important consideration of this study is that participants brought up variables that I never even imagined could have significant impact on transformative teaching. As all participants are teachers with SFUSD, many of the participants work together currently, or have in the past. Participants were not informed of who the other participants were, but were aware other teachers at their school site were participating. Because of this, it is important for all participants’ identities to remain unspecified; participants were offered anonymity so they could be comfortable honestly critically reflecting on their teaching experiences. Thus, no participant discussion groups were held.

Studying the interviews revealed the beginnings of case studies for the different school sites with multiple participants, and relationships amongst the participants became apparent in a way that was quite clear. Providing analysis of these relational dynamics was determined to not necessarily be required to convey a complete response to the research question; however, future review of the data may continue to answer questions surrounding transformative teaching communities and school-wide transformation. With regard to my insider status as a researcher, having my direct colleagues as participants, it is possible that upon completion and publication that many coworkers and administrators of many participants may review this study. Making the results of the study publicly available was a requisite of conducting the study by the SFUSD research department.

Sharing too many specific details from the narrative stories of the interviews would be, in many instances, dead-giveaways of the participants' identities due to the relatively small population of individuals that could have potentially been nominated at each school site. Clearly differing school site structures or dynamics could make it very easy to narrow down who said what, which—in several circumstances impacting whole interviews—could potentially result in participants experiencing some form of retaliation in their current employment. In light of these concerns about participant confidentiality, significant care was taken to present the findings of this study in a way that excludes contextual clues to individual participant identity. To further preserve

confidentiality and mask the gender of the speaker, all participants are referred using the pronoun “they.”

Debriefing, in the form of journaling and communication with committee members, was used to track progressive subjectivity on my part as the researcher. Open and clear communication with my committee chairperson and committee members throughout the research process helped me identify my own biases and changing subjectivity. Journaling and note-taking was useful when investigating my own experience with ideas in the data. Note-taking was particularly helpful for identifying ideas and valuable insights in reflection on the interviews. Any interviews or data collection that appeared to disagree with the developing hypothesis and emerging concepts, that is, negative case analysis, was used to identify incomplete areas of inquiry. Areas that were identified through negative case analysis that were considered to have not reached saturation of data were considered to determine whether further investigation and integration was needed. Additionally, there were a number of conflicting perspectives offered by participants that pushed me to conduct deeper questioning and analysis. These instances of negative case analysis did push me to evaluate my own biases in reviewing the findings, leading to a deeper level of abstraction than I had been initially thinking. A big piece of the analysis process that left remaining questions has been the racism and oppression categories, as described in Chapter 4: Research Findings and Chapter 6: Discussion.

Triangulation, as identified by Mertens (2010), asks the researcher to compare data that has been collected from different sources or methods for

consistency. This includes using multiple points of data to look at each area of evidence. Grounded theory is the methodology employed by this study, thus everything and anything can become data. In Chapter 6: Discussion, existing academic literature and research are triangulated with the data findings to develop the theoretical analysis.

To maintain integrity of the research, particular care was taken to accurately track data as it was integrated into the analysis process. Colors, number labels, and a clear key were used to develop a dependably traceable chain of evidence that connected the analysis and emerging theory back to the data. Based on this chain of evidence, a 60-page framework of in-vivo quotes, codes, and notes with citations to each interview became the foundation for developing the findings section. This clear chain of evidence used for developing the findings section bolsters the confirmability of the data by making it possible to trace every idea of the findings section to each interview from which the idea was abstracted. Additionally, substantial notes and journaling was done during the interviewing and analysis process, which made it possible to stay as close to the data as possible through tracking the process of idea development.

Although there was a large amount of interesting and valuable data, continued data analysis and discussion of this project was concluded to maintain reasonable time constraints for completing a dissertation. Conceivably, it is possible that this research may be revisited and more deeply engaged with to build out a more substantive theory that addresses the data in a more detailed way. A clear connection was maintained between the data and the midrange grounded

theory to hopefully make it possible for future expansion on the research into a full range grounded theory. Additionally, pragmatic materials or shorter publications may be developed from the final product that may require a more thorough examination of notes and deeper analysis of the conclusion. The potential issues relating to the transferability of this research study is discussed in the limitations and delimitation section, which is part of Chapter 6: Discussion.

CHAPTER 4: RESEARCH FINDINGS

The data presented clear concepts that were all included in the description of the findings. However, like the loosely structured interviews, the focus of the data analysis was kept to answering the research questions. Primarily, what does transformative teaching look like when it actually happening in the classroom? Secondly, how is the teacher pedagogically developing and fostering transformations in their adolescent students' worldviews? Participants were asked about what has worked well, or not so well, for them in their teaching careers. They were asked about what they have seen working for their colleagues and for their students. What works between a teacher and student that truly affects the students for lasting change or long-term impact, even outside of their academics? What have these participants seen that fosters transformations in their adolescent students' worldviews, or shifts how they are making meaning out of their life experiences?

The simple answer: Transformative teachers are “real models” who create and increase impact on students by leveraging the power of relationships. They build relational solidarity by “keep it real” and facilitating through providing meta-awareness of how to think on, be in, and learn to navigate the interacting complex rhythmic systems in which humans inherently live. Many of the key concepts in these categories are doorways to already-existing ideas in social science literature; most of these ideas are not very new at all. The key finding in exploring the data is that transformative teachers support students in becoming self-transformers by facilitating critical self-reflection to develop consciousness of

worldview, while rebuilding new meaning through evaluating how that worldview has been constructed, offering conceptual and structural processes for learning to see the epistemological and ontological foundations for thinking about thinking, as well as expanding pragmatics and problem-solving skills. The qualitative data presented in Chapter 4: Research Findings are supporting evidence grounding the deeper pedagogical systems schematic for transformative teaching in adolescent education, proposed in Chapter 5: Theoretical Model.

For the purposes of this data presentation, *teacher* refers to an individual in the position of being a transformative teacher, as described by the participants, and does not necessarily indicate all teachers. In reference to the question asked in the introduction of this dissertation, regarding whether or not transformative teaching is simply good teaching, it is quite evident that all transformative teaching is good teaching, while it is still certainly debatable if all good teachers are fully, or even partially, transformative teachers. *Student* refers to adolescent students, because they are the population these participants generally work with. However, as participant H.L. pointed out, adults and adolescents learn the same way, even though at times they have different starting points. Pieces of data that are attributed to one or a few participants are identified using initials assigned in place of pseudonyms. The views and ideas presented in the following pages were woven together from in-vivo codes, summaries of quotes, and notes from the analysis process. Although 30 participants contributed, their voices are here blended together to create a more holistic picture of what transformative teaching could look like. Imagine developing an archetypal, transformative teacher.

The findings are grouped by category and theme. The description of findings begins with an overview of transformation and how it specifically came up in the interviews. Transformation is a psychological concept, and in the following sections participants explain how transformation is an inherent multi-dimensional phenomenon in education.

The Concept of Transformation

“When a person changes how they see themselves in the world, the path they are on changes” (P.W.). Over 16 participants, including C.G., T.J., V.R., L.S., G.A., P.D., R.B., and F.T., emphasized over and over: through learning how to reframe their own narrative story about themselves for success, students become empowered to believe in new possibilities for their lives. Participants shared that they have seen their students have and can learn new mindsets by creating new thought patterns. One hands-on example that participant F.M. shared was a pair of goggles that when worn, adjust the individual’s eyes to a slightly off-kilter depth perception; students wear the goggles while trying to get a ball in a basket. The wearer eventually gets used to it and can make the ball in the basket. Once they remove the goggles though, perception shifts back and they yet again have to adjust their aim in order to make the basket.

Many participants referenced the work of Carol Dweck (Dweck, 1986, 2006; Dweck & Leggett, 1988; Dweck & Wortman, 1982), calling her research on growth mindset foundational to teaching their students about changing on purpose. L.S. espoused the value of, and positive reward that comes from, their students learning to create new meaning out of past and current experiences. E.C.

talked about the amazement that students experienced when seeing their own stories told through a stranger's eyes as performance art pieces. G.A. was certain that when working with kids that are hard to reach, the most important thing is stories:

I came out of a really dramatic background, and so to be able to relate stories for them is huge. I tell silly stories sometimes, or share experiences from my life. So now, boom, they feel a lot of things with my story. And who I am as a person. And the kids murmur, they're going, "Okay, I can talk to her about this, I can talk to her about that." . . .

I create vulnerability to connect with them through stories. I get them to tell me stories, "Does anybody in here have a story? Or something? A 10-word summary? Did this or that happen?" I tease it out. Or I tell stories of what I learned from a hard experience. Some kids will see it as the parable and some of them will see it as the literal story, so, it depends, it really does. . . .

I'll rework a story with them to get a lesson out of an experience that left the kid sour. But over the course of years of teaching, every last kid invariably says they like the stories. And the next thing they'll say is that, "You believed in me, you were there for me." (G.A.)

Participants, such as G.R., D.G., and E.C, talked about teaching using anecdotal stories because they are important "for learning how to make and remake meaning" (C.H.). Several participants, including C.H. and T.J., have hosted spoken-word art clubs that focus on teaching students to tell their stories, and then re-tell them again in an even more powerful way. Transformative teachers, like C.G., V.R., E.C., constantly use reframing processes in communication with their students for demonstrating how to make new meaning from a situation or experience. Eight participants talked about explicitly practicing with students to reframe meaning-making narratives for developing their students' growth mindset, "asset mindset" (A.M.), heal their "scarcity mindset" (B.M.) or "poverty mindset" (L.S.), and "turn quitters into doers" (S.N). This work takes place in the small moments, hundreds of times each day; as participant O.H. put it, "beyond

the point that it is tiresome.” Transformative teachers relentlessly show their students a better way through reframing stories (F.M. & Y.E.), making refreshing narratives in a way that includes more information and empowerment (P.D.).

Participant M.A. expressed that just excellent teaching—without working with the whole student in consideration of their unique positionality through using a social justice type lens—is not really excellent teaching. A.M. pointed out that all humans are still becoming who they are going to be. Participants C.H., O.H., T.J., D.G., and Y.E. think that by teaching the power of changing on purpose, students are able to find new opportunities and doorways they had not known existed before, on a path to becoming someone who they did not know they could be. Participant A.M. talked about how they have seen it many times: even kids know when it is their last chance to make a fresh start, and they will take that last chance seriously when they come up against it. H.L., like D.N., said that it helps to tell students they need to put “just a little bit more willingness into growing” (H.L.) because a small amount of wanting to grow can end up making a big difference. Nine participants specifically pointed out that they believe adolescents are capable of engaging in transformation because their students are constantly changing and transforming over time. W.F., B.M., G.A., and F.T, told stories where they saw that their students were “starving for tools to transform into the version they see of themselves in their dreams, for even just the permission to dream” (T.J.). P.D. explained that once the student felt empowered, they were off on their own journey. Interestingly, participants H.L., O.H., and P.W. have found that many students needed to experience their own transformation before they

believe it is possible for them to change at all. So, participant N.F. recommended, teachers can help their students by offering a meta-analysis of how far the student has already come so the student can see the bigger picture of their own growth as encouragement to keep going. Some participants, such as G.A. and E.C., have seen their students transform accidentally, as a result of individual experiences, and then realize they can change in other ways too. Teachers do need discernment about the most impactful things that would push their student to change, which N.F. suggested teachers ask themselves: What is the thing that I can set into motion, a process which intrinsically and extrinsically motivates my students to become different?

Participants (P.W. & G.A.) explained that real-world, integrated, multimodal projects and school-curated learning experiences transform a student's understanding of what school-based learning is. H.L. and P.W. have seen through working with their own schools that teachers can create transformative projects and experiences that hone and guide inevitable student growth by showing them steps, frameworks, and resources to be change-makers, activists, and owners of knowledge with contributions valuable to the world. Y.E. had found that teachers need to provide opportunities for students to be someone new, and practice changing how they are, on purpose. Students want to get closer to their dreams and teachers need to allow them to reinvent themselves (T.J. & F.T.). S.N. and L.S. have seen that teachers need to be ready to let their students change, by letting go of their expectations and being open to their students becoming different.

Nearly every single participant talked about the importance of teaching connections between making meaning in the classroom to the context of the students' real-world life. Participant N.F. stressed the importance of how "students need context to understand how situations affect them." Teachers can support their students by providing "meta-level" (N.F.) conversations to "draw a roadmap for the processes the student is already going through" (R.B.). Participants said the contextualizing and naming of experiences helps students locate themselves and their real feelings by giving them a grounding point to connect with and move forward from. E.C. reflected that everyday transformations happen when students make "real-world connections" using applied skills and concepts around "personally relevant content" to see a new approach to a situation. Participant P.W. shared that they "build interest, respect, and engagement" by showing students "things they didn't know about the world" in a contextualized and meaningful way that confronts resistance by alleviating cognitive dissonance.

Participants S.J. and W.F. have seen that teaching meditation and reflection can be used to give students an opportunity to integrate experiences; they believe it helps students sit with their understandings of how the new information fits into the context. Transformative teachers "bridge smartness across classroom walls" (K.I.), or what C.H. explained as connecting ways that students see their own intelligence outside of school to the way they are asked to use their intelligence for learning inside of school. V.R. found that using ideas that are meaningful to the students as a starting place can draw out the students'

real-world knowledge so they can see how it intellectually connects to course concepts. Participant G.A. actively practices being able to paint pictures with words, so they can provide students with a more-clear image of the real world—they aim to evoke conceptual imagination grounded in academic topics. R.O. observed that teaching students the context and connection to ideas they already understand is essential for their ability to integrate learning. P.W. and L.S. believe that if the classroom learning does not impact the student worldviews outside of the classroom, then it would not change them as a person or how they show up in the world.

Participants talked about seeing some kids that are “changing against all odds” (R.O.), almost every day. In H.L.’s experience, students are becoming more amazing than their own teacher thought was possible, often “before [the student] realized it happened” (O.H.). Participants like W.F., H.L., B.M., and A.M. have seen themselves change too: they may have had a class that felt difficult at first, and suddenly everyone becomes different in order to meet each other somewhere they can move forward from. However, C.G. warned that if the teacher is looking to see the shift in their student, they would likely be disappointed. Sometimes, M.K. reflected, if a teacher is lucky they might get to see the student “turn a corner” by moving or shifting toward a better way.

Participants, including K.I., G.R., and W.F., think students need teachers to help them grasp the full depth and context of a situation in order to realize how they are being affected by it. A.M., G.A., and S.J. have found that students, especially those with complex trauma backgrounds, struggle when articulating

their true experiences. As is discussed in Teaching Systems—Theme: Facilitative Real Model, students constantly need models to see and talk about a better way to be in relationship with complicated situations, as scaffolding to develop their own capacity to create and change mental models. Eight participants have found it common that students are frustrated when they don't know how to navigate a situation or do not know a better way to get what they want. Participants K.I., F.M., S.J., D.N., N.F., and O.H. shared stories to demonstrate how they and other teachers learned to practice becoming situationally aware and present with their students. M.A., V.R., Y.E., and M.K. have learned to be able to provide needed language or give skill-building support to students while they are overcoming tangible or abstract blocks to increasing their own intellectual fluidity. M.A., S.N., C.B., and D.G. recommend developing a variety of differentiated social-emotional tools that are compatible with different worldviews and positionality. In addition to meditation and self-reflection, participants such as F.M., T.J., Y.E., and W.F. suggested that students need psycho-social development tools taught as if self-understanding were an academic content area.

Themes and Categories

In the subsequent sections, the themes and categories comprising the remaining findings will be elucidated. The themes represent encompassing but not subsuming, multi directional and dimensional interconnected systems, which are comprised of categories constituted by nested dynamic systems as components of transformative teaching. These findings are the qualitative descriptions of a

systems schematic, clarified in Chapter 5: Theoretical Model. The themes and categories are presented in an order relevant to the proposed theoretical model.

Relationship Systems—Theme: Relational Solidarity

The participants in this study know that the power of relationship is what holds it all together—in the moments of genius or the bleakest moments when all hope feels lost. The following five categories are about the power of relationships in transformative teaching. The relationship between a teacher and their students is vital to learning. Good relationships are what stop bad situations from getting worse, and make it possible for kids to believe they just might beat the odds stacked against them. In consideration of the previous themes, it is clear that without good relationships, teaching would be void of deeply meaningful interaction and engagement. How have participants been able to build deepening mutual relationships in which students and teachers are able to grow and move forward together? In the uniqueness of the teacher–student relationship, each individuals’ awareness of their self and their worldview evolves by learning how the other person sees them, and editing one’s own actions to become more aligned with their bigger purpose. When the student and the teacher are willing to shift, change, and meet each other, it creates the flow of energy in the learning dynamics. Strong relationships are what allow the student to trust the teacher, and provide the teacher with leverage for moving forward into transformative moments.

Motivations.

This category describes the student-centered motivation of transformative teachers. Fourteen participants named that they teach “for the love of the kids” (F.M.). R.O. shared, “It’s just a genuine love, concern, and firm belief in my kids.” For them, transformative teaching is “about creating an experience for the students” (S.J.), and as D.N. believes, teaching is about being really present with the students while they are learning.

I remember when, this one teacher said something about like, “I don’t get why people are teachers when they don’t enjoy kids.” . . .

And it’s like, Ya, so? They said something funny. . . .

Like I’m going to laugh, I’m not going to sit here, and pretend it wasn’t funny. . . .

We’re here to enjoy each other, to a certain extent. I feel like, days when I can bring joy to the classroom, I feel like that brings a good vibe to the classroom. . . .

And it was such a simple thing for her to say, but like, it’s true. I’m doing this because I like it. (C.B.)

For some, watching students overcome, learn, and grow is what makes it all worth it.

To me teaching is loving. Like, that’s all it is. . . .

You can be the greatest teacher in terms of knowledge, and think you have all of this information and methods and strategies. But, it’s worth shit if you don’t love your students, if they don’t really feel that love. . . .

For me, its like, you’re not getting anywhere. You can pretend that you taught them, but you couldn’t teach them, at least not at the level that you could’ve. You know? . . .

So, for me, now, I’m more suspect of the teachers that don’t give hugs when a kid needs it, because, you know, hugs are human. (C.H.)

While participants, including F.M., talked about how a teacher’s love for their students is a unique unconditional love, six others explained that they feel their students are like their own kids. It is a love that respects boundaries (W.F.) and remains professional while being honest, real, and sometimes raw (O.H.).

Participants, including B.M., D.G., and F.T., described seeing themselves in their students, pointing out how important it is for the students to feel truly seen and loved for who they are. T.J., speaking from the memory of their own marginalized experiences of school and thus a personal understanding of where their students were coming from, contended that love is the “dopest drug out”:

Think about it. You go to school, and so many of us have been put in the back of the room, for our behavior. “Go to the back, you’re loud,” “Go outside, you’re loud,” “Go to this other place, because you’re hard to deal with.” . . .

First of all, you don’t want to deal with me? I’m not here to be controlled. I’m here to learn. Who cares if I need to stretch? Or make some noise? You need to be educated enough to know how to adjust your teaching methods. If you can’t handle a little bit of stir, then why are you in the classroom? Go back and do guard duty. Or maybe get an office job. Because if you want to be on the front line, you are going to come into contact with some soldiers that have been hit a couple times. . . .

They might not have a pencil, because they went through some extraordinary effort to get to class. Who knows what neighborhood they had to cross, or what rival gang they had to talk to. Who knows what food mom doesn’t have on the plate. And you’re worried about them walking in a little late or smelling like weed? Or upset they don’t have their supplies? Not, “Thank God you came here, now take a seat”?...

That entire conversation, when they walk in the door, should not be, “Oh how come you don’t come to my classes?” It should be, “Okay you good, are you all right? You been happy? What can I help you with?” Just changing the conversation. . . .

They need to understand that they can be all these things and still be a king. They can be tardy, they can be unprepared, they can be a little unaware, they can have all of these things. Before they would just come in and sit in the back and be quiet or get sent to room 200. Or, “Send me home, I don’t care, because if you don’t care about me, I don’t care either.” Because obviously it’s a repeating cycle. . . .

But when they come in and they feel love, love is the dopest drug out. I’m given it to them every day. I know that sometimes they take advantage of that love, but I’d rather give them grace and mercy than anything at all. Because that’s what they haven’t gotten before in school; they are long overdue for that. (T.J.)

Participants, like V.R., L.S., Y.E. and G.R., have found that for the most part, the experience of loving relationships is why students come to school happy, funny,

and kind, even though they can't read well, or complete the assignments, or maybe are even going hungry on a regular basis. H.L. and O.H. agreed, "love is what makes it feel okay to hear the hard truths" (C.H.). Sometimes though, the boundaries of a teacher's position does limit what the teacher can do, as a professional standard, regardless of how much they care:

I think for teachers, it's really hard. It's so hard because, you know, we're not supposed to do so many things. Like, you're not supposed to give a kid a hug who desperately needs a hug that day. You know?...

You're not supposed to touch a kid at all, who desperately just need someone to put a hand on their shoulder so that they can just, breathe. For like, a little touch of pressure can be a relief, to help them relax; because no one else ever gives them that moment. (G.A.)

Participant I.S. explained that the "kids make it worth it" for the teacher. In turn, love is what will keep students coming back to their teachers after they want to quit and give up. Love is what will keep students showing up to school when everything in their life outside of school has gone ballistic (G.R.). P.W., E.C., and M.K. have found that teachers are able to provide relief and solace from the intensity of learning to navigate the world.

Behaviors.

This category reviews behaviors of transformative teachers that reflect values of solidarity. Twenty-six participants advised that relationship-building is paramount in teaching. Both D.G. and S.N. used the same phrase: "no relationship—no academics." G.R. highlighted that there are many types of teacher–student relationships, ranging from formal to informal, playful to serious, literal or imaginary. I.S. explained that some students always feel like strangers, while some feel like family instantly, taking on characteristic ways of relating to each other. Participants, like C.G. and F.T., told about students returning and

thanking them for the positive impact they had on the student's life, which had never been forgotten; meanwhile the teacher hadn't even realized the student was listening, even believing the student had hated them.

Participants, such as G.R., B.M., Y.E., and F.M., emphasized that teachers need to be able to manage relationships with families and outside "community stakeholders" (E.C.) like caseworkers, the courts, or foster homes. Particularly when it comes to navigating relationships with other adults, it is important for the student to see that the teacher is on their side, like they are really considering the student's best interest:

I think the other thing that really affects students' growth is repairing the student-parent relationship. In my first year, having parent-teacher conferences, and I was like, "Oh my God, this is not what I expected," because I'm navigating with a student who I see as succeeding; but, the parent has this idea of their student being, maybe, the bad kid or a failing student. . . .

It's weird, I have to advocate for the student, tell them what they are doing well, and then tell them what they need to improve on, without setting off the like [hand gestures a mess]. Throwing them under the bus and setting off an adversarial relationship with their parents or making a bad one worse. . . .

With parents, it's fun to get them on your side. Because then, also once they're on your side, you get to have better communication all around. Then the family is supporting us, at the same time, by now supporting their student. (M.K.)

T.J. explained that students bond with teachers they can rely on. By acting in recognition of their own unique position of power, K.I. emphasized, teachers like D.N. create opportunities to develop relationship by building what O.H. called "intellectual rapport." Participants like G.R. and D.G. cultivate these moments by maintaining self-awareness of the impact they are having on students' lives.

Ten participants, including C.G., F.M., F.T., and R.O., shared that the teacher builds relationships where students can trust the teacher to navigate tough

situations in a good way, by recognizing their position of power in the classroom, and intentionally impacting social power dynamics to create a better learning community. A strategy highlighted by D.N. and S.N. was that from the very beginning of the year, they work to get their toughest kids bought-in first, regardless of what type of student they seem like. Participants G.R., E.C., P.W., and V.R. have found that often the students who seem the most fiercely difficult at first also tend to become fiercely engaged with their learning when they are interested and feel connected through good relationships. Fourteen participants identified that connection through good relationships can ground or stabilize situations in which the student may have otherwise felt too vulnerable, thus would have withdrawn from engaging in learning. Participants, such as P.D., B.M., G.A., and Y.E., described that, based on knowing the student and the student trusting the teacher, the teacher is able to mediate situations to socially and emotionally support students so they can intellectually access the content despite their hard feelings around doing the work. Participants, including K.I., F.T., and G.R., believe that students let their guard down to focus on learning when they see and experience the teacher managing classroom power dynamics well enough that the student does not need to be on high alert to protect themselves from other students.

Participant M.A. described that a foundation of building teacher–student relationships is ultimately upholding standards based in learning, which draws the student more deeply into their intellectual mind. H.O. has seen that this type of relationship is earned; it takes work on behalf of the teacher to build it. This same

type of depth, of intellectual connection through relationship, is the intrinsic reward for the transformative teacher:

I want to say that the number-one thing that makes a successful teacher is that you have to enjoy the kids. Like, on a personal level. It's certainly not worth the money. You're not actually saving anybody. So? You can't. You're probably not going to get a movie made after you. Like, and, if you really care about your content, your going to meet somebody who doesn't give a shit, and that's going to ruin your day. . . .

You have to like people and want to talk to people. Enjoy their energy and remove the person from the student, and focus on the actual persons intellectual mind. And that's how I've made my bonds with my students. Because, I don't care really at the end of the day; I really don't care how good at math they are. . . .

I mean, I would like them to be really good at math. And I evaluate myself professionally on if they are good at math. And I would like them to be good at math. But in terms of, the reason I'm still a teacher after going through a lot of crap to get here. . . . It's just because I actually like working with the kids, and watching them interact socially, and develop intellectually. And the math is just, the medium for everyone to get to be in the same place for it. (S.N.)

F.M. has found that the teachers "enthusiasm, excitement, and positivity around intellectual development creates buy-in" to learning. Teachers create buy-in, according to I.S., through baiting students with good healthy fun.

Thirteen participants, like R.B., I.S., and W.F., recognize the power of their student relationships and leverage this to build a better learning community. F.T. suggested that teachers focus on using strong relationships to have positive connections with the students' whole intellectual mind, by not just engaging their academic skills. V.R., P.W., E.C., and M.K. believe that by helping students see the difference in these two parts of themselves, students become willing to take risks they may not have been brave enough to take. Like other participants, Y.E. had found that students who want to feel successful through investing themselves

in an idea they care about, are often community leaders despite their academic weaknesses.

The kids in my school, they are here, really, because they decided they were going to be open to trying a new way of learning. I think, it's just like, they have to be open to it. Because I can be really all up in your space, and I know when to back out. If they say, "Will you remind me?" Or, "Help me after school?" To be like, "Can you help me with this? I don't get it." Or, you are struggling on something academically. . . .

But it's like, the student is trying to be the assistant director with this program. Or is like, "I want to do improv games, even when I don't have to, because I'll earn credits." Those are the ones that have bought in, because they like the opportunities. They're the ones that are not necessarily the most academic. . . .

They're the ones that are doing it because they like it. These are the ones that like to think, talk about ideas, have experiences, but hate writing it down. They may not go to a four-year university, but, just the fact that we made up a deeper connection, outside of like, whatever abandonment issue they've had. Or, whether or not they've come through foster care, or from a dysfunctional family. They're able to make some kind of deeper connection with what makes them happy, and what makes them kind. . . .

That's, for me, like, just be nice. Can we be kind? When did we stop teaching kindness? Can we just be a kind person? Be kind to each other. And so, for me it's like, they might not have finished their five-paragraph essay, or finished all their assignments. But they are doing all this extra stuff, because they actually feel invested in something else, outside of their turmoil. There's always other shit happening outside of school. (E.C.)

P.W. and others have concluded that for many students, 50 minutes a day with one teacher and 37 other students is not enough time to develop depth and trust in relationships that makes them able to academically receive the support they need. Participants, including R.B., L.S., B.M., and F.M., cited that the lack of time to provide individualized support for their students is one of the major obstacles they struggle with. T.J. and V.R. pointed out that many of the participants' students are socially isolated in their lives and rarely spend time with people outside their family or community. F.T. concurred, also noticing that some students even

isolate themselves from their peers at school for various reasons. G.A. furthered that these are the students that need their teachers to ask them to be present, and then draw out their intellect until they are engaging, on some level, in the classroom. Conversely, E.C. has found that the students who come say hi—the ones who crave connection and relationship but don't really know how to build it—they are often the students that can change the most.

Participants pointed out that it is not just the classroom curriculum or personal issues that are helpful for the students to connect with teachers over, but real-world experiences and issues that impact or could impact the student. Participants like S.J., G.R., and T.J. have topics that they follow and regularly discuss with their students, ranging from music and pop culture to world issues and politics. C.B. uses common interests to build intellectual relationships that are personalized, even if that student is struggling academically in their class, they can intellectually stay connected. A veteran participant and coach, O.H. explained that the constant process of rapport-building allows relationships to draw out a higher level of the intellectual self and can help students get around blocks to their growth by questioning their own thinking through ongoing dialogue with the teacher. Several participants, including C.G. and F.T., agreed that because “different students respond differently to different teachers” (C.H.), one teacher can't bond with every kid. C.H., D.G., and P.W. have seen that this sometimes creates tension between adults, because they see a situation differently from each other. D.N. said that the teachers need to be able to “hold the tension between different adults having different roles,” and thus will not have the same

relationship with each student. B.M., O.H., and D.G. have found that in working to have a deep impact on a student's learning and growth, it is useful to have no agenda and an open mind. Participant R.O. called it a "spiritual openness," something that allows them to develop unique relationships with each student.

Respect was a term that 18 participants identified as central to building relationships in the classroom. P.D. explained that teachers demonstrate respect through focusing on developing individual relationships with their students. I.S. recommended building mutual respect and understanding through small moments of connection. O.H. has found that students "need to trust [that] teachers believe they can do it" before they believe they can. N.F. shared that teachers often lose trust and respect in the small moments, particularly, as L.S. has observed, when they pass by a struggling student under the assumption they don't care or aren't trying. Teachers build students' trust, S.J. reflected, by being consistent and predictable in ways that help kids feel secure. This can include always having the same consequences for the same breach of expectations (W.F.), having a specific place to turn in and pick up work (C.B.), or specified hours for extra support (S.N., M.K., & D.G.).

We have a lot of kids who have adult responsibilities, in middle school, looking after their own little siblings or helping out. . . .
Some of them even work, which is crazy. . . .
They have earned the right to be respected, and in my mind, they would've been respected anyway. . . .
You can't, as a new teacher, come in here and demand anything.
. . . .
You have to win the trust of the kids and their respect, because kids don't learn from folks they don't like. . . .
And so, it's not about catering, or being soft, it's about being human. And connecting, and saying, I understand you. (R.O.)

It can also be more complex, like creating clear boundaries for hard conversations (O.H.), mediating difficult discussions so all voices are honored (A.M.), and stopping exchanges that are going too far (C.H.). Participants C.H. and D.G. discussed how important it is to be able to receive student feedback and respond to their thoughts. Demonstrating respect happens when the teachers “let students teach you” (M.A.), and as T.J. pointed out, the “kids inevitably change the teacher, the teacher needs to let that happen.” S.J. highlighted that the teacher letting kids change them shows they are “not above the kids.”

Thirteen participants concluded that listening to and seeing through the students’ perspective shows respect for their position and role in their own learning. Teachers must honor students’ experiences and what they are saying by listening to students, “truly actively listening” (Y.E.). Participant G.A. explained that giving students the space and “permission to share their truth,” students are able to hone their ability to listen to their “inner voice and intuition.” Participants, including R.O., D.N., T.J., and C.H., teach students to tell their truth about the world, from their own eyes and experience, as a practice that combats oppression. B.M. shared that students need teachers to help them think about, and to know where they are at, in the world.

It was really important for me, early on, to learn to make yourselves vulnerable to your students. To share who you are with your kids; you have to. You can’t just go in there and say, “I’m the teacher, you’re the student.” . . .

You have to make yourself honorable to the kids. Without that, you are not going to build community. If you want them to meet you, you have to share who you are. I had a colleague that was super resistant to it, but he learned how to share himself in a way that felt authentic to him, and to who he is. . . .

As a teacher you have to figure out how to be comfortable in your skin, because the kids notice when you're not. They notice when you're not being real with them. They need to know you are going to be real. They don't need to know everything about you, but they need to know you can be real and honest with them, authentic. (G.A.)

Participants pointed out how important it is to tell students the truth.

Transformative teachers “do not tell students they are awesome when they are not” (R.B.), but do tell them when they are in a difficult or unfair situation. C.H. believes that students need to learn how to advocate for themselves and what obstacles they are up against; it does not help them to develop a fake but pretty outlook. “Kids are perceptive” (F.T.), they “see and know the truth” (G.A.); so, when teachers lie to them, students lose respect for the teacher (B.M.).

Participants E.C., G.R., D.G., and B.M. emphasized being honest not just about the world being lived in, but about sensations and feelings, variables impacting decision-making, why the teacher decided to do this instead of that. Or, even that the teacher is extra-tired and grumpy today so please don't take it personally (A.M.). All humans have bad days, and it is important to have bad days in a good way, which R.B. disclosed, sometimes starts with being vulnerable by letting the class know they aren't fully on point in some particular way. E.C. highlighted that teachers and students are both “emotionally invested.” Just like teachers get burned-out, the “students' feelings are real” (R.O.). Seven participants emphasized the need to apologize while owning mistakes. Participants C.G. and R.O. talked about the importance of working to keep issues that arise between the teacher and the student just between them if possible, because it maintains confidentiality and builds trust. However, this is contrasted

by the importance of teachers being able to discern when it is important to involve another individual in the conversation.

Participants like P.D. have found that by showing willingness to support the student in moving forward, they learn that teachers are willing to get their back. And sometimes, P.D. continued, if the teacher gets their back, often the student will return the favor in some way. Participants P.W., M.K., and P.D. have found that teachers are able leverage good relationships in the classroom to get through difficult topics or stretches of time, which for some mysterious reason, can feel like forever. They are able to use their relationship to “convince kids to try” (C.B.) or focus despite their own resistance. Participants D.N., V.R., and M.K. recommended not taking for granted that the teacher–student relationship is “about balance” (C.G.), “a give-and-take” (N.F.), a reciprocal relationship made in “living negotiation” (D.N.). The student is “learning to cooperate as an adult” (R.B.); the teacher is showing them how to make agreements around what it means to uphold social relationships (H.L.).

When negotiating meaning and making agreements, S.N. highlighted that it is important the teacher does not interfere with how the student has constructed meaning. Transformative teachers, such as D.G., F.M., T.J., and P.D., refrain from denying or invalidating students’ interpretation and perspective. Instead, participants say that teachers need to use “active listening” (Y.E.) and nonviolent communication techniques (W.F.). They help the student negotiate better language to represent their experience (H.L.). When teachers practice creating

better relationships consistently, they are supporting students in developing rich social dynamics as members of a learning community.

Perceptions.

This category identifies the ways transformative teacher's focus on developing a clear perspective of the learners' experience. As participant F.T. put it: "Adolescents today are critical consumers, and in no other market than education is it more important to know your audience. Students literally have the world at their fingertips." Twenty-five participants discussed adapting teaching pedagogy to keep up with the cultural shift in value of education, as a result of information accessibility, toward various types of research-based, critical thinking, and problem-solving skills approaches. In order to help students develop a deepening value for the experience of learning and growing on purpose, G.R. said teachers must "truly know the kids." Twenty-three participants explained, in order for their students to open up more deeply, they need to feel truly seen for the intellectuals they are. Participants F.M., A.M., and F.T. reflected that it does "get easier to know who the kids are over time" (C.B.), not just in getting to know one student, but by becoming familiar with the social systems dynamics in the schools community and the city. Participants S.J., P.D., M.K., and L.S. have found that connecting with students becomes easier by getting familiar with the types of collective attitudes, struggles, or culturally related worldviews that their students commonly begin with.

You know, teaching is like, I think I will use the analogy of, classical music and jazz. Classical is all, written out. Every section is written out, strings horns, percussion . . . it's all written out. But, in jazz, you have the basic melody, and after that, it's all about improv. . . .

You gotta be in touch with your kids, man, on the fly. What makes them tick? What's roping them in? What's hooking them? You know? And sometimes, it has nothing to do with the structures that they want us to follow, man, because our kids are human. Each child learns differently. Each child is motivated differently. And you have to teach each child like an individual. (R.O.)

In R.O.'s example, the teacher is learning how each kid works while keeping the whole class connected to move to the same melody. Participants, including I.S., F.M., G.R., and F.T., shared that students respond and connect when they feel that the teacher understands what they are seeing. Or, as B.M. said, the teacher needs to "see through the kids' eyes." Building these connections unblocks the pathway forward in the teacher and student relationship; it is a "common ground to move forward from" (S.N.).

Participant M.A. first raised the concept of "knowing the student as an intellectual," by engaging with the students' academic mind through their work and seeing how they respond to learning.

It is about, how they are grappling with their whole life experience—that is their intellectualization. And, it's my job to understand their brain. And then to say, "Okay, I understand what you see, and where you are at. Now, here is what you need to do to move forward." And everything is just about forward motion. . . .

Its just, "Here is the next step. . . . Here is how you make the next step, that's all. . . . Here, make the next step. . . . Yep that's all. Now, make the next step. . . . Yup . . . I get it. Here, make the next step." . . .

Not like, "How could you give me this?" Or, "What the hell is this?" Right? . . .

Its just like, "I get it, next step." (M.A.)

The back-and-forth between the student and teacher propels and moves the intellectual process forward. Participants T.J. and N.F. explained it is essential to believe in the students for who they truly are. P.W. expressed a challenge that comes with actively practicing simultaneously seeing students for who they are

right now, while teaching for possibilities that could be coming on their unique intellectual journey. Participant D.N. emphasized “structuring classes to meet the student’s needs” as a whole person, rather than the teacher’s personal agenda. Bringing in the “whole person” (A.M.) makes it possible to “eliminate[s] the sense of anonymity” (G.A.) that comes with large multicultural classrooms, like in SFUSD. G.R. recommended, “learn what [students] believe reality is,” find what they are good at, and “figure out how to hook [students] into learning through those access points.”

Veteran teacher participant M.A. said that it is “a failure as a teacher to not see the kids for who they are.” S.J. gets to know students through remembering what their interests are to bring it into conversations in the classroom, or what G.A. emphasized, “know their world, know their culture.” L.S. focuses on getting to know the students’ reading abilities to plan differentiated instruction accordingly. Still, truly knowing a student goes even further. It is seeing how they think about approaching social situations (K.I. & W.F.), which steps or clues they are likely to miss when looking at a problem (N.F., D.G., V.R., & S.N.), and which part of the new idea is going to be the most difficult for the student to process (I.S., L.S., & A.M.).

Eleven participants commented on the idea of students each having a differing zone of proximal developments and concluded this is a very real issue to pay attention to—more complex than pedagogically functional in large diverse classrooms. Y.E. has experienced that teachers need student feedback, through constant dialogue and reciprocity, in order to understand what students need and

move forward. “Most kids are not the same as all kids” (P.D.), so assuming students are having the same trouble as another is not always effective. Which, O.H. pointed out, scientists are now showing that there may be hundreds of types of minds, the human brain may be more neuro-diverse than previously thought. Participants, including K.I., D.N., S.J., and V.R., have seen that every individual has their own strengths, and their own way, with their own goals. D.G. and M.A. explained that when the teacher has no idea what their students’ strengths and weaknesses are, they are not able to plan as specifically for engaging their students in real learning. One participant lamented, “My idea’s blow when I don’t know where the kids are at” (N.F.), and went on to recount disastrous lessons that could have gone better, had they thought about how the students have been doing recently. L.S., R.B., and M.K. pointed out that teachers also need to consider whether their students have had any past experience with the content, to plan for first developing a context for the new content to connect into. Or, as G.R. suggested, framing a juicy background to help students get motivated by the “so what?”

An idea that was significantly discussed by participants is scaffolding. Fourteen participants believe the need for more and improved scaffolding in learning is real. I.S. reflected that a scaffold could become many more things than at first thought: the right understanding between teacher and student makes it possible to target oddly specific needs. M.A., N.F., O.H., S.N., and P.W. agreed that scaffolding becomes especially effective once a teacher has gained depth in

their content knowledge around what is being taught because they can see nuance and subtleties in where the student is getting stuck.

I use lots of structure, because I'm a pushover. In terms of content, I mean, scaffolding is really a big part of it because most of the time there is an access point. And, if they don't see it, then, it's because they've internalized messages from the past that they are not going to be able to access it. So, I make a way that they can get into the academic, I make them a part of it. . . .

Structure-wise, it's mostly just getting to know them, to make an opening happen. Because, once they see that I'm on their side, and I'm rooting for them, then they're much happier being part of class. They still don't do [what they are supposed to] all the time, but it's not resistance, it's not a power struggle. (C.B.)

Participants, including D.N. and M.K., found that providing scaffolding to understand content and develop academic skills builds student confidence.

Participant M.A. reflected that using scaffolding to its highest potential provides students with a way to access rigorous intellectualism regardless of their academic strengths. H.O. explained that rigor is made possible because good teachers can break ideas down in a way that makes sense to variety of types of thinkers and learners. Even if they have to approach an idea seven different ways while explaining it to slower students, the quicker students still benefit from seeing the many perspectives offered through using scaffolding to create access points into engaging with the intellectual concept.

S.J. and F.T. have seen that transformative teachers know that every student needs goals, a purpose, which, V.R. highlighted, will be different for each kid. M.K. emphasized that students need a plan to work toward, whether it is for an internship, graduating, or reaching dreams they never thought possible.

Conversely, L.S. said, what many other students truly need is basic literacy and arithmetic skills. Participants, including S.J., agreed with C.G., who said that

teachers must “acknowledge the part of the student that continues to come to school,” despite appearing like they don’t care about schoolwork, because this keeps them coming back until they are ready to engage with their learning differently. Fourteen participants highlighted that it is the teacher’s responsibility to figure out how to make learning accessible because “when kids aren’t feeling sure how to get into it, they don’t” (D.G.); it is the teacher’s job to find a way to get students to engage with learning.

Participants agreed that teachers must make, show, and talk about “clear objectives for learning” (D.N.), that clearly “tie back to the big idea” (M.K.) and are “not just about work completion”(L.S.). A.M. emphasized, “compliance is not learning.” Twenty-three participants focus on truly understanding their students’ strengths and weaknesses to develop multiple access points for differentiated instruction. S.J. offered, “passions and pride are access points.” A.M. has found that when a teacher does not create different ways to get into the concept, using techniques like Universal Design for Learning (Rose & Meyer, 2006), struggling students will not be able to create a way to access the idea on their own. Already-high-achieving students may be able to teach themselves a way to get into a challenging situation, which K.I. and O.H. warned, has tricked novice teachers into not seeing they need to improve their scaffolding and accessibility.

C.G. emphasized that “meeting a kid at their level, to help them intellectually move forward, is a need; this is not lowering the bar.” To do this, participant P.W. has found the most effective curriculum provides consistent structure and predictable processes for “multimodal learning” (R.B.) that can be

applied across content areas and subjects. F.M. and Y.E. offered that this might include creating templates, strategies, tools, and choices for ways to show what the student knows. Transformative teachers use classroom systems, structure, and processes to create deeper “personalization” (C.B.), like rubrics and open-ended assignments that leave room for each student to make it their own.

Students may be working to different levels of depth or technical skills, but rigor can still improve each student’s learning by asking them to step up from where they already are. When a teacher has gotten to know the kids, participant N.F. suggests that teachers still keep data on what works for their students and where each student is, through designing evaluations that are about understanding what students know and which piece they didn’t grasp. Participants D.N., M.K., S.N., and E.C. pointed out that despite the current testing controversy, which overlooks the need to truly know the kid, it is important to focus on developing student-centered assessments that help them become more self-aware learners. Although it takes time and attention to get to know each individual as a learner, this process allows the teacher to develop strong relationships in the classroom. Learning to understand each student’s mind makes it possible for the teacher to see what the individual truly needs, so that they can break concepts and ideas down into parts that are possible for the student to digest.

Stance.

This category identifies that transformative teachers must stand in relational solidarity with their students, first and foremost. Over half of participants talked about the importance for kids to know that the teacher is “in

their corner” (T.J.), that a particular person who they encounter on a daily basis is looking out for them and going to hold them accountable. They need to know beyond a doubt that they have an adult “on their side” (C.G.), a teacher that “doesn’t want them to fail” (C.H.). Participant P.D. explained that students are perceptive; they are aware of the relationships they have, and know who will get their back when they truly need it. G.R. shared that students need adults who will help find a way to work things out, so they can see possibilities for how to move forward. Y.E. explained that without a relationship where the student knows that the teacher is looking out for their best interest, the student won’t be open to learning from the teacher:

Kids don’t care what you know until they know that you care. They don’t care how much you know, until they know how much you care. . . .

And it’s true. Especially in this community, this population, more than my last two schools by far. By tenfold. . . .

In this school, if they don’t know you, then they don’t know that you love them. They just won’t, it’s really hard to get them to do anything. Even when they do love you, it’s very hard to do anything. (Y.E.)

While transformative teachers use many techniques for building relationships, 19 participants emphasized they practice focusing on always building relationships and having conversations in a student-centered way. Participant R.B. explained that when a teacher is able to see where the student is coming from, “it becomes a different type of learning”—they are able to have the same starting point from which to guide the student toward their dreams. Through truly understanding their students’ social positionality, teachers are able to provide maps for navigating a way to somewhere different; they can help students see what they need to learn in order to reach their goals. They are able to help students see “a way out” (T.J.),

how to access possible opportunities, and develop better strategies for getting their own needs met.

Transformative teachers, like G.R., Y.E., and P.D., know that one of the most frustrating feelings is seeing where a student is at but not knowing how to reach them. And participants, including K.I., D.G., and D.N., warned that no matter how frustrating it is, the teacher's inability to get through to the student is not the student's fault. The key to moving through challenging dynamics is to continue the "fight for the kids' right to develop their intellectual mind" (S.J.). When all seems lost for a student, "fight even harder" (T.J.). Participant A.M. explained that they have been able to continue to fight this fight out of "faith in the kids, not in the systems" they live within.

In some ways, having a competitive fight, or that fire, within me, having an enthusiasm for things; for me as an educator, I try to make that as contagious as possible with my students, if that makes sense. They knew that I was fighting for them, and wanted them to fight for themselves. To create opportunities for advocacy, and for them to advocate for themselves, and also for me to advocate for them. . . .

And I'm competitive, maybe in that I just want the best for them, and I want them to work so hard. And, want to work so hard for them. While also, hopefully, still creating within them, a sense of joy in what we are doing, too. . . .

That it wasn't this, mundane, of, "I'm going to make you successful in writing a five paragraph essay," but, "Let's write about something that's going to get you inspired and fired up." Write something that's meaningful for them and relevant to their lives. (A.M.)

Transformative teachers use education to "show kids what is possible in life" (K.I.). They work to "expose their kids to the real world" (P.W.) as much as possible while developing the intellectual mind through multifaceted communication.

C.G. has seen that transformative teachers work to “give [their students] a reason to have confidence in [them],” by becoming what M.A. called, “the light,” guiding students through the murk of this uncertain world. F.M. advocated for giving students hope for what is possible by showing students unknown options, a variety of new ways to be successful in the world. Participants do this by redefining success and talking about being successful by using different types of thinking. R.B. and E.C. talked about how different strengths or styles in learning may be helpful for deciding what type of work the student would like to do in the future. Participants pay attention to seeing and knowing their students, and then as a result, become able to bring out a stronger version of the student than they had been able to see without the teacher’s perspective. T.J., B.M., and V.R., teachers who all grew up in the same neighborhoods as their current students, elaborated at length on the importance of focusing on teaching students to use self-knowledge for developing new goals and dreams they had not thought of before. Participants emphasized the importance of “making the world feel accessible by teaching students how to approach it” (E.C.), both while in school, through extracurricular programs, and after graduation.

Participants agreed with M.A., who said it is the teacher’s “job to find what is good” in a student, to truly see them for who they are. P.W. explained that not getting to know a student is a teacher being lazy in their work. F.T. and B.M. suggested that teachers show they care by being present with the students in their learning processes and intellectual development. Participant E.C. has found that the “kids see, feel, and know” when the teacher is really in their corner. T.J.

clarified that transformative teachers focus on “creating a way for students to access their inner greatness, channel it, and hone it.” Transformative teachers focus on helping students be the best version of themselves, through the students’ own eyes.

It was discussed by nine participants that biology really does have a lasting impact on a student’s ability to think and psychologically grow, but it can be mastered for where the student currently is. Participants have seen when a teacher is “focused on intellectually hooking the kid” (P.W.), that “younger kids are easier” (F.T.). F.T. elaborated that when a student is younger and less accustomed into negative mindsets by their life experiences—it is more likely the teacher will be able to have a positive impact on the student’s ability to become a self-transformer. R.B. commented, “16, 17 years old is too late” for a kid to really buy in. T.J. lamented, “senior year is almost too late, and too underserved.” L.S., a special education teacher of over 20 years, reflected that really, all of “high school is too late,” especially for students with deep literacy issues that began in elementary school. All of the remediation and support will not get back years lost from being underserved before high school. The schools “underserve students until it is too late to address it; everything accumulates, the issues compound and become worse over time” (F.T.). Administrators, teachers, and support staff all echoed the same concern: schools must intervene earlier; freshman are still potentially young enough, but not for all of them.

Valuation.

Participants talked about values in a number of ways and it is clear that they believe their students' values are at the heart of both their successes and failures. Eleven participants pointed to an inner conflict of values amongst struggling students: they can't decide what is important to them or how to get it. R.B. said that a cultural obsession with "celebrity status" has distorted students' value systems. C.G. has seen that "kids want and value money because they believe they are supposed to," but they do not realize what it symbolizes, is actually worth, or how having access to more money could impact their lives. W.F. has found their students do not realize how many things they truly do value more than money—or, C.H. reflected, what other value they offer that might help them actually end up with more than just money. Y.E. thought that when students believe the purpose of education is to go to college, get a job, and "get money," they do not truly understand the value and purpose of education.

Conversely, participants including C.G., I.S., R.O., and P.D., have seen that when students become personally, intellectually, or emotionally invested in something, in anything, their values shift. R.B. noticed that most students believe that they share common values with each other, even when they don't. A.M. and Y.E. reflected that students are often hurt or blindsided when they encounter conflicts in values with their peers. W.F. imagined the kids not seeing their peers' values as different than their own comes from not understanding the complexity contributing to their own value system. W.F., S.J., and I.S. agreed that through having conversations with their students and "showing value for learning about

what is important to each of them as individuals” (D.N.), participants have been able to create value for community in their classrooms. R.O. talked about teachers needing to have value for their own integrity by responding to students’ work with genuine feedback that shows the student how to make improvements. “Show value [for students] by changing to meet their needs” (M.A), stressing that a teacher’s ability to see the value in a student’s ideas is foundational to a strong teacher–student relationship. Participants, including W.F., B.M., T.J., F.M., and E.C., are sensitive toward student values to build rapport by talking about, reflecting on, and bringing attention to what they all care about together. Participant G.R. emphasized that transformative teachers get into the complexity of why it is actually beneficial to question status quo values and develop a personally defined values system that is unique to the individual.

M.A. shared that showing the student how to move forward demonstrates that the teacher believes the student is actually able to do the next level higher of work. I.S., K.I., and S.N. agreed, saying this shows errors are common learning mistakes, not an insurmountable personal flaw. H.L., C.H., and N.F explained that by taking time and attention to genuinely correct a student and provide them with the missing information that brings clarity, participants believe their students feel value for their work. D.G. said that their students need to have what is valuable about their ideas pointed out, they need to hear it out loud and see it in writing. Students who are already prepared to give up, clarified C.B., deeply need to feel another person’s value for their intellectual work or they will come to believe it is

pointless to try. D.N. has experienced that students need to know teachers value their learning in order to believe it is indeed valuable.

A prevalent idea in the data was to have and show value for the humanness of each student. To do this, together teachers and students examine their own values with a lens based on their unique positionality, while respecting others who may have a different view. W.F. and P.D. both work to create and provide teachers with structures and techniques for facilitating this individualized, personal process, which can bolster a student's focus on academics and intellectual growth. W.F. has found, through years of coaching teachers, that teachers can learn to model their own meta-awareness in the moment, showing their students it is possible to practice increasing their own self-consciousness by being transparent about how they reflect on and change their own thinking as humans. W.F. used the example that when a teacher who has been consistently agitated and flustered begins talking transparently with their students about how to improve classroom dynamics, they show value for their students' humanity by receiving and taking to heart their feedback and reflections. This value helps the students feel respected by the teacher. S.J., G.A., P.D., and F.T. agreed that because their relationship is reciprocal, teachers earn value by demonstrating the value they have for their students.

Nineteen participants shared that teachers show value for their students as individuals by validating their students' experiences and empowering them to speak their truth. C.H. and M.A. have observed that too often adults assume they understand the student's perspective, thus they end up ignoring or simply

overlooking the student's valuable truth and contribution. N.F., A.M., and D.G. agreed that taking the time and having patience to understand where confusion is happening, or what is truly causing a disagreement, shows value for all individuals involved and develops respect. The teacher can show the students they are valued simply by being honest about their own thoughts and emotions, by being self-aware, by not taking their hard feelings out on their students:

You get to see me at my good, my bad, and my ugly, and vice versa. I'm aware of the fact that I'm a human. Yes, I'm your teacher and that holds its own clout. We have power because of that. At the same time, our space is only as good as each one of our members. So, if we aren't all good, it's not to be good for everybody.

Just be really explicit and open. Like, today I was having a really bad Monday. In the morning I came in, I said, "Follow this format, I need you to be here. Whether or not you think that's fair or not, it's just better for everyone, I have to be honest with you." Just like, if they come in and they're like, "I'm not really feeling everything right now." I'll be like, "Okay, you take your break." I get it, we're humans, we need to have our space. (R.B.)

Transformative teachers show value for humanness by practicing being a better human on purpose, and talking about the ways they are working on themselves (C.B. & M.K.). Participants, including G.A. and W.F., emphasized the importance of telling students personal stories as parables. W.F., B.M., R.O., and T.J. talked about using a metanarrative about their own growth process as a model, sharing their reflection on how they integrated the experience, and describing how their own values changed through the process.

Participant S.J. talked about creating experiences that model the value of balancing privilege. P.D., D.N., and Y.E. shared that teachers show value for activism by empowering their students to become activists in their own right. O.H., T.J., and G.R. believe that transformative teachers show value for their

students by honestly engaging in tough conversations about politics, ethics, or brainstorming ways their students can have a big social impact. R.O. explained they try to show the value of being a “light warrior,” of why it is okay to stand up and fight if it is in defense of the light side, not the dark side. Participants S.N. and T.J. pointed out that teachers who fit the wounded healer description are not truly valuing their students as empowered humans, and thus usually framing the student as a victim in one way or another. W.F. and S.J. have seen that when teachers have not done their own inner work, they cannot actually offer empowerment to their students because they are not truly empowered themselves.

Real-World Systems—Theme: Attunement and Entrainment

This theme is about the importance and merit of keeping it real with students. Realness is not just about honesty and transparency. It is also about communicating in a way that is really meaningful and resonant for the student, so that when they listen to what teachers say, it is attuned with the way teachers act and work with students. Realness is about dissolving illusions and teaching students how to see through the oppressive forces of cultural entrainment.

They need to come up with real answers that show critically thinking about the real world they experience every day. And, especially now with everything going on, it’s like, I want you to be able look at the world critically—and not just believe all the crap you see about the world on the Internet, and on Facebook and on Instagram, and whatever you see snapped. It’s just like, you know that’s not real life? It’s delusional, it’s such a mess.

I can’t even imagine what it would be like to grow up right now. Like, the social media alone, so much in just the issue of celebrity. Kids have an obsession with getting celebrity status. Just pretty nuts. I’m like, what warrants a famous person now? It’s like, to these kids, achievement is no longer based on anything real in our society.

So, it’s our job to teach them to be critical consumers, and use their intellect to see through the illusions people created for marketing

purposes. It is our job to talk about and dispel celebrity delusions that confuse their ability to understand the real world they live in or they will continue to be oppressed through cultural propaganda. (R.B.)

Forced entrainment: Racism.

Racism is a form of structural violence resulting from forced psychosocial entrainment to inherently oppressive systems targeting populations based on race to their detriment. There is no doubt that racism is a significant issue among the participants, it is such a large topic that it needed its own section, although both oppression and racism are subsumed by the category, forced entrainment. Participants shared anecdotes about their difficulties confronting race issues, including some conflict amongst members identifying as the same race. The data could be re-analyzed, focusing on race issues alone, with interesting and deep findings. Indeed, participants agreed that race issues are a large part of the limiting worldviews that many students and teachers are confronting every day in classrooms and in their lives. Mostly, participants disagreed around what is the right way or the wrong way to deal with limiting learning-related worldviews regarding race issues. They offered debate around what it means to be empowered into social mobility, based on their differing personal values and positional experiences of structural violence and systemic oppression, in terms of racism. It is clear, however, that race matters, a lot.

Participants explained how “institutionalized racism is a silent war,” and they “sit in the middle of it every day” (R.O.). Participants of all backgrounds agreed that there is a constant question underlying conversations in their schools: Can White people get it? W.F. asked, can White people teach not-White kids without perpetuating oppression? Sensitive issues came up over White teachers

bonding with Black students; C.H. and M.A. were conflicted, questioning, is it inappropriate for White female teachers to bond with Black male students?

Participants brought up questions of being unsure if White teachers should be working primarily with students of color, even if they themselves were committed to this in their work.

I mean, I remember my first day of teaching in a classroom with another teacher, that very big personality that feeds his kind of teaching. He was mixed but he identified mostly as being a Black male, with a pile of dread on his head and piercings. He was cool, he was intimidating to some because he was very, like, fierce and righteous. In a way he really smacked me in the face with like, what it takes to be that kind of teacher.

...

Especially when your skin is white and you're a woman. So, my first day of teaching with him, I was 26 years old and everybody in the class was either Latino or Black and there is one Asian boy. And, there was one White kid. I said, he was the Caucasian or the White student, and the teacher said, "No. He's Jewish. So, he understands oppression. You don't." And I was like, damn. . . .

And then, he'd asked me to bring the class down to the computer lab. One of student sure taught me a great lesson that day. He was, like, refusing to stand in the line. He sat down in the chair. Now, I'm like, "You need to get up. Stand with me in line." And, I'm trying to like, plead with him. The teacher comes up and is like, "Why is this young man sitting in the seat? I told you to line them up." Now I'm like, "I tried but he won't listen." And he was like, "What? He won't what?" . . .

And he's like, "You, little White girl, you're not going to make it here. You want that kid to move, you're gonna a make him move." And, I was like, I felt like I was a student basically being chastised by a teacher myself. And. I was like, "What? You can't make him do anything." And he's like, "To hell you can't! Young man," and he's like, "young man, did she ask you to stand up?" And he's like, "Yes," and he's like, "Then stand up again." And he was like, "Oh, okay." . . .

I went home that day, and I was in tears. I had an epiphany, and like, also that moment of reconciliation. What I learned from that, and what has really driven me, throughout, is like . . . well . . .

After this hazing, I had many conversations about this approach. I was also in a White woman's classroom, and she grew up here in the city, really poor. And the students loved her. She was not very rigorous, but she was very loving. They loved her but didn't respect her, or learn from her really. So between these two worlds, this is what I saw. . . .

So, my driving thesis was, you know: Can a White teacher teach Black students? The same way that a Black teacher can? (C.H.)

Participants like C.G., D.N., L.S., and C.B. shared that there had been occasions while teaching when their Whiteness was an obstacle—because they knew they didn't, and truly couldn't, understand their students' experiences of racialized oppression.

Last year, I had such an issue with, when, the students in my class and she, she is a Muslim student, and there's this whole racism thing happening.

...

It was really hard because I couldn't speak to the things that she has gone through, I'm a White person standing in front of the students, like trying to empower—this class is all about empowerment, but it's hard to always teach about that, when I don't really know what they've gone through—how unempowered they feel. . . .

And I don't know what it's like to go through their experiences, to walk on the street and be scared for my life all of the time—because all of the terrorists things that have happened. . . .

The student was very, opinionated and a feminist, she just, I don't know if it's a shadow issue with me, because I am White. . . .

I'm still not sure, but I had to have a conversation with her and Mr. [administrator] together, because she wasn't happy with the way I was teaching the class. . . .

Ultimately it was because she needed to make a point, to the whole class, that yes, there is racism against her. . . .

And she was upset because I'm the one, I keep saying, "You can get over it" and all of these things, and I never said, I never didn't have compassion, or empathy, for where she was coming from. . . .

It's just, when the messenger is a White female, it can be really hard to take in, when I talk about changing the victim narrative, or refusing to accept being victimized. There can be a lot of resistance in a class like this. Because especially if the messenger is White. (W.F.)

E.C., P.D., and T.J. questioned the impact of White teachers on non-White students, and whether or not this matters at all. Is it all White teachers that are not able to participate in empowering students of color against racism? Or is it just some White teachers, who maybe have not done their own inner work? O.H. reflected on many years of teaching, and thought it might be possible that finally,

their reputation for being an activist had over-shadowed their Whiteness. Their White allyship had been cemented in the community, which they had worked to develop over many years as a teacher in SFUSD. Thus, O.H. believed that their Whiteness was no longer a regular obstacle in working with students.

Latinx, Black, and Asian participants shared stories of students identifying with them through having similar struggles overcoming racialized oppression. F.T. had found, through spending years as a teacher of English Language Learners, that he was able to more deeply connect to students who shared his own lineage's racial and cultural identities. The class would share stories about their experiences of being a new the U.S. because "discussing these stories helped students renegotiate how they viewed themselves and what is possible for them" (F.T.). For both students new the U.S. and those born in San Francisco, there are intercultural social-group dynamics, which are inevitably based in racialized social dynamics. Cultural differences and language are often barriers that need to be actively addressed, like language and social norms, and as S.N. pointed out, many schools have their own cultures that are a unique mix of different lineage groups. The state licensing requirements do include a Cross-cultural Language and Academic Development (CLAD) certificate (California Commission on Teacher Credentialing, 2018), however there is little in the way of continuing education once the licensing exam is passed. T.J. and O.H. highlighted that social science departments are beginning to address the complete lack of curriculum centered in the worldviews of their diverse student population by developing Ethnic Studies courses. However, this, as S.J. pointed out, is not a large enough

step to combat the White Eurocentric-focused curriculum that maintains the status quo, even perpetuating racially and culturally motivated social oppression. At P.W.'s school site, the faculty have worked to address racial identity issues in the classroom by fostering situations where "bonding across race lines" can happen by building allyship through activism in their school communities and working together to continue the fight against racism.

Several participants shared that deconstructing racism through teaching is a primary issue that needs to be addressed in order to repair inequity in their classrooms. A White participant explained their strategy for addressing racism while teaching:

I just think it's really important to look at what's going on in the classroom in terms of how students treat each other. There is such a, we live in an unequal society and that inequity gets carried into the classroom; and that African-Americans students are not seen as intellectuals in our society. . . .

So it is very important that all of my students see my African-American students in my class as intellectuals, and showing their work, and pointing out what they do, and how other people can learn from them. . . .

And like, that is my way to fight against racism; learning about antiracist teaching was really helpful for me. (D.N.)

Fourteen participants cited that they explicitly use antiracist teaching techniques, because they have found this to be effective in their own work. Y.E. argued that antiracist philosophies and pedagogies create more open communities where students learn to become empowered while using their voice to speak out about racism. When asked if race or poverty appeared to be a bigger issue facing resolving equity issues in education, veteran teacher, administrator, and coach M.A. responded with certainty, that racism is the underlying issue in teaching.

It's about race. . . .

I mean, there is an expression floating around, “playing the race card,” for a reason. . . .

It’s that people don’t want to engage in that paradigm, of owning their role in a racist system. . . .

And the first thing, I mean we had fights here for years, of people being like, “Oh, I’m not a racist,” and it’s like, [gestured absurdity]. No, racism is a construct, it is a social construct; it is not about calling individual people names. I mean, why would you call people names? . . .

So, it’s a construct. So, in other words, you didn’t do it. It’s not your fault at all. . . . It’s the water we are swimming in; we are swimming in the pool of racism. . . . So, although you didn’t do it, and it’s not your fault, we still have the responsibility to do something about it. . . .

And so, people wanna say, “Well, you know what they say, all kids are the same, it doesn’t matter”—even though, all of the evidence is in. . . . When you just aggregate all the data across the country: African-American and Latino and Native American students are doing less well—even when all things are equal. . . .

So, in other words, the African-American and Latino children of doctors are doing less well, than the White children of doctors. . . . So the gap is still there—regardless of the social economic status. There is a lot of research about that. It’s is racism, not poverty. . . .

If you are an English teacher and you don’t know the grammar or linguistics, see what I am saying, like, if you haven’t studied African-American language, if you haven’t studied complex sentencing, then you don’t know, you can’t know, what’s going on there all that well. I see that in teachers all the time that I coach. . . .

I mean there is so much research about an African-American student’s paper—and a White teacher and an African-American teacher, each grading it and reading it so differently. . . .

Antiracist teaching is about African-American pedagogy, Latino pedagogy. So, it’s about the teaching: that there is specific ways, specific strategies, methodologies, curriculum, responding to student work, that are more effective with African-American students and their ways of learning and communicating. . . . The research is out there, all you have to do, is have the will to do it. (M.A.)

Conversely, another participant who identified as African-American, argued that antiracist teaching is an illusion that merely gives the impression of actively working toward addressing racial inequities, but is not nearly sufficient. T.J. was teaching an ethnic studies course that enrolled all of the ninth grade African-American male students, titled “African American Male Achievement.” The participant explicitly gave permission to share the name of the course despite the

possible admission of identity this could bring. T.J., a spoken-word artist with a poetic cadence, explained:

In the hallways, they talk about antiracist teaching. It's just a really good saying. . . .

A lot of kids, I know, have had a crappy ass experience here. . . .

Another teacher I know was talking about trying not to make waves around here, afraid to piss off the administrators. . . . I was like, you're crazy—I'm coming in here, and I'm going to be proud, and I'm going to teach them a very strong, strong, empowering, culturally dynamic curriculum. And it's going to piss off a lot of people. . . . And so, if I'm not pissing a lot of people, I'm not doing my job. . . .

And I came in friendly of course. But, a lot of my students that are learning empowering information have been met with resistance. . . .

See, I pretty much force my kids to write "King" on all of their assignments—in my class, out of my class. I have all 90 African-American students. Teachers will cross out King on their papers and tell them they're not Kings, and tell them not to write that. The teachers resist, shoot down any idea of them owning that title. . . .

Yet, they can sing n*gger all that they want. No one says nothing to them. They let them say n*gger, n*gger, n*gger, they say it all day long. . . . But they switch to using the word King, and, and then, they've got questions, they can't code switch like that. . . .

So, I found that to be quite disgusting to me. And it's not just one teacher; it's a bunch of teachers that felt that way. And even if, you know just talking about my program, it just makes people feel really uncomfortable. . . .

What about the girls?? What about this? What about that? . . . How dare us Black man have something that's just ours. Like, how dare we come in here and say, this is for us and us only—because everyone needs to have something. . . . And get this, somebody actually called and asked if there is a White male achievement class!!! . . .

It's called everything, it's called school. . . . You have a White school that institutionalizes racism. Everything in the school is for White people. . . . We have ethnic studies, well, big deal. . . . We have never had something that's for us, by us, taught by us; that fully instills in us how to be in our power. And how to be young men, and how to raise that glory, and how to be that banner, and raise that victory fist. . . .

And a lot of people are intimidated—the fact that I can come in here, meet the students and bring the best out of them? And other teachers have been doing this for eight, nine, 10 years, but can't get them to raise their pencil up? It makes them feel a certain type of way. . . .

Yeah, a kid that's now saying, I am a young Black king, he told me earlier this year that, before I got here, they all had thought there is nothing good about being Black. . . .

How does that happen? I think being in a place where you foster growth. And for this individual specifically, all he had saw through education and the media was how worthless he was. . . .

Now, we have a room for the lesson, for how powerful we used to be, how great we were, the kingdom we come from, they get to know Black history. So now they know about their greatness within, it's inherent; I just don't think they knew how to access it. (T.J.)

Regardless of participants' ideas around how to address race issues, Black vs. non-Black race issues were raised as having significant impact in some situations. A White participant, who had been teaching for 31 years, believes that the standards for African-American students have, even recently, been actually lower than the established expectations for other students, as a broad district policy.

So, we have had some Black kids that would spend their whole day walking around the hallway. Not this year. We haven't seen that too much yet, I think because they shipped all of those students out to less academic schools. . . .

But it got bad, and why it got bad was because the district has a policy that they will not suspend African-American males, no matter what they do. I don't know if, if it's my school's interpretation of it that's wrong. . . .

But, what they were basically doing is, the kids would find out that nothing would happen to them, no matter what they did, and so it just escalated. . . .

So they would just stand there or be walking around the hallways. They had no boundaries and the security guards would just follow them around the hallways, all day. So, the security guards were basically just babysitting them and so they weren't sending the kids back to class, they would just hang out with them. . . .

I think it's racist in itself because we have lower expectations of African-American boys. How can you have an expectation of people and say, "Well no, but, it's not for these kids. They don't have to do that." . . .

You're basically saying that you don't believe that they can do it. And I don't think that's fair. And as a parent, I'd be like, furious that you don't have the expectation that my kid can do what every other kid can do. . . .

I didn't like it, I'm really not a fan of that whole business, right? But basically, they were just letting the Black kids wander around. (F.M.)

The lived experience of racism and colorism leaves the Blackest students stuck at the bottom of a caste system, wandering the hallways not expected to return to class, like F.M. shared. Racial issues like those described by F.M. are neither isolated nor trivial.

Participants identified several racialized psycho-social complexes, presented previously in the Social Justice section and further integrated into Chapter 6: Discussion. R.O. identified the new Jim Crow laws and the industrial prison complex, a reference to the modernization of previously legal institutionalized oppression. Patterns of division within the racial groups were identified through what participant T.J. named the house slave—field slave complex. E.C. identified the tendency of Latinx students to believe they are destined for labor jobs, and not college, because it is culturally normal. F.T. discussed the pressure of a vastly different racialized experience: a large portion of students must contend with the Asians as the model minority complex. Participants, including S.J., M.A., and V.R., made clear the significant impact of White fragility and White guilt in classrooms. Each of these psych-social complexes contributes to the social construction of colorism, or a social power hierarchy based on skin tones. Looking at these tensions elevated significant questions from the data, regarding how to teach and to break down racist social structures, and what does it mean to truly address colorism’s impact in social systems.

Strong disagreement existed among participants surrounding which people in their school, district, and greater society are truly doing the best work in

empowering students to overcome the oppression wrought by racism. They raised the question: What exactly does it mean to be empowered, in terms of racism and oppression? C.G., a history teacher, believes that understanding and being able to accurately talk about it is paramount to empowerment. C.G. recalled struggling with a colleague over how to address students who were continuously calling each other racist in social situations without really understanding what racism actually is, or even calling the teacher racist for setting an expectation.

We changed our curriculum; we needed to throw more slavery in there because these kids were complaining about racism in school. . . .

Okay, you want racism? Okay, let's talk about it; we can go there—I don't know what a math teacher does when the kids all start to say you're racist. . . .

You mean by I'm racist, I'm supporting the White kids in class? There are no White kids here. . . .

They really need to understand the power dynamics, where does racism come from? Why the hell is it here? Like, you're complaining about racism but you don't really understand it. You won't actually learn about it, so like, don't complain, talking about it is a way of shutting that down. . . .

It's like, No? All right, let's talk about it; I'm not afraid to talk about it. Racism was caused to make slavery work, it was made after slavery you know, that kind of stuff. I think the kids are fascinated when they hear it. . . .

It goes along with my whole thing, which is war and violence and nonviolence. I structure my class around why you shouldn't be in the military and why armies are bad. That is the big theme that I push over and over, and I also tie it into their lives—its good because they're obsessed with violence, they love it, like, check out the new weapons of war from World War I, you can get them into that. . . .

On the other hand I use it to transition back into a discussion of, "All right, so, is it cool, that we have a program at our school, that makes you wear uniforms and walk around in submission? Do you know they're training you to be bullet catchers? You know they hope you don't go to college and have no choice but to join the military?" . . .

Racism is a big one, it helps with being the only White guy in the room, to get that on the table in the beginning and like, put that out there. I'm super antiwar so it's really important to me to put that in. And also of course you're obsessed with violence; you're a teenaged boy. War itself is actually really awful and that's the debate in class. Calling them bullet

catchers, sort of makes them realize they need to know and talk about the implicit underlying things that are really going on. . . .

Like, I'm worried about you guys; you need to learn about racism as you're going into a racist society. You need to learn about our government because you're going to have to deal with this government, they want you to follow their rules by either going to prison, to war, or into debt. They will try to get you to obey in one way or another. You're going to need to deal with it. (C.G.)

Transformative teachers know that their students need to be educated about racialized structural violence in order to be empowered in confronting their lived experiences. They need teachers who teach to who they are as human beings, where they are at as learners; regardless of whether that means the teacher needs to educate themselves for how to do that. The participants made it clear that racism is a significant issue for individuals of all skin colors, while Black students suffer structural violence the most, as a whole group.

Significant questions deserving of further exploration were raised in the data regarding how to confront limiting learning-related worldviews about race. Is race really a Black and White issue? Can White teachers truly empower and be transformative teachers for Black and Brown students? Is racism the same issue for Latinx students? Is racism against Asian students comparable in oppressiveness to racism against Latinx students? Or, how is an Asian student's experience comparable to that of a Black student? How do we, can we even, separate the experience of poverty from the experience of racism? Some participants think poverty is oppressively equivalent to racism; some very strongly believe it is different because race issues are not just Black and White; Latinx issues are not African-American issues, or Asian issues, or economic issues. One thing was clear in the data regarding racism: it is a huge issue that

must be addressed in the process of transforming limiting learning-related worldviews, and transformative teachers are not ignoring it, even if they aren't sure how to handle it.

Forced entrainment: Oppression.

As discussed in the previous section, racism is a specific form of structural violence that results in and maintains psychosocial oppression. This section focuses more broadly on how all types of oppression result from forced psychosocial entrainment to inherently oppressive human designed systems, which can vary greatly in scope and reach.

All participants discussed, in one way or another, that it is important to “explicitly teach understanding of and ways to communicate about oppression” (D.N.), both in how it directly affects the student and on a broader global level. Participants believe that for their students, “internalized oppression” (W.F.) is very real. Without the self-awareness, reflection, and deep self-knowledge discussed in previous sections of this Research Findings chapter, 15 participants expressed that teachers perpetuate the language and attitudes that foster entrainment to and internalization of oppressive worldviews, despite best intentions. Participants at four of the participating school sites developed collegial groups to work together. The aim of the groups at all four schools was to learn how to deconstruct their own implicit biases while developing a plan to shift classroom and school-wide culture into one where oppression can be addressed rather than ignored. Participants, such as K.I., W.F., S.J., H.L., M.A., O.H., and P.W., argued that school cultural shifts must begin through the teachers working

together in distributed leadership, and that administration must be willing to participate in teacher-driven cultural transformation. Participants B.M. and L.S. emphasized that students deeply need “language tools to talk about and question oppression” (A.M.). Twelve participants posited that it is their responsibility to develop and teach their students both standard and unique rhetoric used for creating and deconstructing oppression.

Transformative teachers, including W.F., B.M., Y.E., T.J., and F.T., educate their students to overcome their internalized oppressions with ways to practice forms of active resistance. Participant A.M. has found it essential to provide “tools to undermine it,” ways to see it and to see through it. Students need to be able to look on oppression and feel empowered to really look at, to really address it, to “overcome it” (M.A.). So, participants like R.O., G.R., O.H., and T.J. lead discussions about how past oppressions have shaped today’s society, how social systems became the way they are, and why others may want to keep them that way. Transformative teachers know their students need to see models as guidelines for questioning and overcoming the oppressive cultural identities they may have been pressured into, or picked up along the way:

I try to understand, like you know—yes, there’s stuff going on in this world. But we gotta figure out how we can fix it, you and me. How can we fix this? Like, as a whole, as an individual, as every human being basically. . . .

So, I bring in the real world. And that goes for, especially with my Black students, like, I see they have a tough time. I had a tough time growing up. You know? Just, like I said, I grew up out here, in the same ‘hood. So I seen a lot, and I heard a lot, and it was really difficult. . . .

So I try to let them know, like, “You know, even though you are in your environment, you don’t have to be that product. Like, you can be better than that. And that’s the thing, you know, you have so much more growth to you.” So, that’s something I try to make sure that they hear. . . .

“Yes, we have tough times, but when you think you are in hell, you gotta keep going in order to get out.” And even like, using little quotes that will stick in their head, stuff like that, try to put them on. And let them know, I wanna motivate you to do great things. (B.M.)

Participants, including M.A., D.N., T.J., and E.C., highlighted how the Bay Area is rife with overt economic and political violence, based on race and socioeconomic status. R.O. highlighted how, currently

kids are overwhelmed by the San Francisco social–political climate. . . . There’s a lot of social economic and political violence here, and we aren’t talking about the bang bang bang, violence. . . .

It’s an unhealthy masculine flavor about this whole Bay Area, actually the whole state but especially here, you know, it’s not friendly it’s not congenial, it’s not human, it’s very cold and dismissive . . . and I have had a belly full of it, I know my kids are stressing about when they become adults and they will have to make it outta here, and I fear for them trying to stay here and make it.

C.H. explained, “kids need to understand how to combat it from within” the system. Participants agreed with R.B., that this starts with the student developing an understanding of their social positionality and what contributes to their ability to have mobility from that position:

I think some are very aware of their social place, of where their lives fall, and why things have happened to them. But, I think also, some of them just think it’s the way it is. Just because that’s how it’s supposed to be. Because that’s how was for my parents. It was enough for me, it’s enough for my kids. . . .

They don’t understand all the power dynamics at play. I think it’s really hard to understand the nuances of like, our systematic oppression and exclusion. And so, there are some who recognize that; and there are some who can see it in the world around them, but don’t always see how it’s affected them directly. . . .

They can talk about it abstractly, like, “Oh, Black and Brown people are oppressed.” But when they see it for themselves, they don’t recognize it, they don’t see the micro-aggressions they continue to experience. They now, essentially, have been put out of their schools for not being submissive to oppression. And they don’t see that it is all linear; that those are connected. But some are more aware of it. . . .

I don’t ever want to be like, “See look at this, this is how your life is. This is how your life has been skewed.” It’s trying to present them with

situations that, hopefully, they can relate to—in the history of things, narratives of things that they can relate to, that they can see themselves in, and hopefully they can learn from. (R.B.)

Participants, including F.M., M.A., L.S., and P.D., agreed over and over that transformative teaching is about empowering their students, not treating them like “victims to their lives” (S.N.).

K.I. discussed the importance of “explicitly teaching power dynamics,” which have been manipulated to create phenomena like “prison mentality” (R.O. & T.J.) and “poverty mindset” (S.J. & W.F.). Participants R.O., H.L., and T.J. discussed how these mindsets, mentalities, or canons of worldview, are impressed into an individual’s psychology through cultural conditioning. T.J. focuses on teaching students to not participate in their own oppression, having students replace oppressive language, like the “n-word,” with terms like king and brother. They plan in-depth conversations to break down ideas like, “Black is scary,” then provide scaffolds to a better mindset, with an idea, “I will reclaim my power, I will not be afraid of my Blackness” (T.J.). Participants, including W.F., C.G., and P.D., pointed out that although students may not know the cause of their difficult emotions and reactions, they would rather understand why they feel this way than not. D.G., V.R., T.J., and E.C. emphasized that students deeply need and want to learn how to confront what they see: an unequal society being perpetuated through police violence and covert avenues, like evictions, fires, gentrification, and home sale pressures.

Transformative teachers explicitly and implicitly teach about systems of institutionalized oppression using stories of how it is perpetuated by governments, through social systems, as part of culture and religion. M.K. has seen that

transformative teachers support “resilience and resistance” from within a system that is designed for oppressed groups to fail. Participants like R.O. discussed the idea of how society is creating new underclass groups on purpose through manipulating social dynamics, which essentially maintains modern slavery.

Our theme, for the semester, is resistance, resilience, and revolution. [The students] have to realize: this is some deep oppression that they’ve been in. Because, if you don’t know you’re in it, then you have no idea. It’s, internalized oppression. Like, what is that?

I think, even the Black Lives Matter movement was even difficult for them to understand. The people that were not of color, really didn’t understand. . . .

I’m mean, there are some things especially that kids depends on their family for. And, there are some families who genuinely don’t have knowledge that being African-American, as part of the system of racism, is what has gotten them into this position of poverty. Or, whatever it is, foster care, or incarceration. They are totally in denial. I mean, it’s never been spelled out, it’s never been talked about in the classroom. . . .

The fact that many of these kids are being systematically oppressed has not been discussed with them. What I hope for other teachers to be part of, is that you have to teach the social justice aspect. You have to teach them to be conscious. Once a day, reach their consciousness, whether through theater, through writing, or through performing. Part of that consciousness is being able to address *all* the social injustices. . . .

Like, “I’m getting to use my voice, to be able to say something about what’s pissing me off, truly. And, why I got to this position, which I’m pissed off about now.” “To be conscious and show that I’m not just an angry Black teenager.” “I’m not just some wild Latina pissed off because the social system has put me into this position because of whatever it is.”

. . . .

Because it’s equity versus the equality. So it’s like, “Because my parents have been deported, because I’ve been taken away from my home,” it’s validating their fucked-up situation. And the thing is, like “Yeah, that is real. You are experiencing that.” Like, “You are not imagining it, and you’re not crazy.” . . .

Another thing, they’re going to be like, “Okay then, I’m just going to blame the system.” But that’s the question. What can we do to show each other the way society is built? What systems are in place that you are going to decide that you are going to change? And that, to me, is the bigger arc of the learning. . . .

I don’t know what happens sometimes to the kids when they graduate, but hopefully they are walking around with that lens of consciousness and understanding of why they maybe aren’t getting that

promotion later in life, or because they need to get a PhD, to have a piece of paper to prove it. (E.C.)

Participants actively discussed oppression in terms of relationships between the local community experiences on the micro level, to the globalized systems, the global communities that operate as the macro level. History and English teachers have found they are able to do this directly through curriculum, while teachers of math and science found ways to be more creative. Participants, including N.F., V.R., P.W., and M.K., discussed lesson plans to build mathematical models of social systems, discuss inequities in medical treatment, or “gender bias in the engineering industry” (I.S.). Participants G.R., R.O., and O.H. show students how to explicitly examine the ways social, economic, and political systems interact to show what a person’s options are for exiting from their positionality—which, T.J. emphasized, happens through developing new perspectives and learning how to set up the variables that construct the pathway out.

A lot of teachers do this thing, where they give this message to the kids, where, it’s just not fair—they ramp up the stress level to the max—they say, “You’re just going to end up homeless on the street,” or something like that. And, it’s like, “What? You can’t tell somebody that, all the horrible ways their life could go wrong. You know, there are people who drop out of high school, and they make more money than any of us. You don’t want people to have a bad life, how are you predicting all that? Why are you putting that on people?” I don’t believe in that. I don’t want to say to them, “Hey, you have a bad lot in life and don’t have options, and you’ll have more options if you do it this way, other wise you won’t have any more good choices.” . . .

No. You want to keep those doors open to the idea of, “I want to have a good life.” And, what is my idea of a good life? I mean, I think you will have a good life, but either way, it’s not like you will have a bad life if you don’t do this. But, this gives you more options. You could make more money at this job. Or, maybe to have more choices about what kind of job you wanted to do, or get to do, if things go this way. . . .

So I will do that, but, I will not sit there and say, “You have a bad life, you will be homeless and amount to nothing.” I’ve heard people say that, “You’re not going to amount to anything,” to a kid, and I’m just, like, why would you ever say that?! And sometimes, it does motivate some kids, because they want to prove the teacher wrong, but again, I don’t believe in it. . . .

We aren’t trying to break kids down; it’s not the military. You give them as many options as possible, you want them to actually know and be familiar with as many paths as possible. We’re here to serve them and their families, that’s what we’re really here for. (F.M.)

Teachers know they can’t do all of it, so they develop community partnerships, host events, and bring in guest speakers to provide students with relatable real models that have walked similar paths. They build in, and leave room for, opportunities during which students can practice overcoming residual self-doubt resulting from internalized oppression.

Attuning to learners’ positionality.

Participants agreed with I.S., who explained that for many students, when it comes to engaging with and completing lessons, “ability is not the issue.” F.M. has repeatedly seen students who genuinely believe that “it is better not to try, than to fail”—for a variety of reasons. Over time, this becomes “its very own disability: self-sabotage” (C.G.). This is when students are “so afraid to be misunderstood” (B.M.) and do everything in their power to “avoid feeling like a failure” (P.W.), such as entirely refusing to engage in certain types of learning experiences. I.S. has found that some of the most challenging students to work with are those who offer simple refusals, such as, “I can’t,” or, “I don’t care,” or, “So what?” Participants agreed with G.R., who pointed out that a number of their students have experienced “emotional abandonment” either at home or through their education. Participants reflected that in their experiences, these students have

needed some degree of “social and emotional healing” (I.S.) to be able to successfully take care of themselves and engage in growing on purpose.

Participants shared C.G.’s conclusion, that it is entirely “normal to hate school.” N.F. agreed, reflecting, “I am not here to make kids love school.” Transformative teachers, like F.M., understand students who “shut down” are engaging in a form of “self-sabotage” and are able to recognize that the student is “not trying to spite or disrespect” the teacher, offering that taking student behavior like this personally will never become useful. There are simply “some kids who do not want to be reached” (D.N.) and they will avoid teachers’ efforts to engage in conversation, look at the teacher blankly, or act angry to push the teacher away. However, D.N. has found that when a student “won’t work, it is usually for a very real reason”: because it feels safer than letting someone see what is really going on.

Participants reflected that there is a qualitative difference between “the doers or the quitters” (D.G.). When a student is quitting and refusing to try, it is important to “find out what the real issue is” (S.N.). Participants, including F.M., L.S., P.D., F.M., and T.J., agreed that teachers are the person who begins the process for finding out if a student is being blocked by issues outside of school like death of a family member, immigration issues, or neglect, or if a student needs more academic support, possibly because they have an undiagnosed learning disability. Participants brought up concerns about students whom they described as what S.N. called a nonbeliever. These students do not appear to have value for learning nor do they see purpose for engaging in academic tasks, like

they simply do not believe they could benefit from school. This was described as similar to learned helplessness, where students learned they didn't really have to do anything to move forward in school or take ownership over their own learning because it simply seemed useless. L.S. and R.B. shared they see these issues were often alongside academic trauma from poor educational experiences in the past. Traumatizing learning experiences may result in students who are not able to ask for or receive the help they need because they fear failure, or retribution for not trying hard enough. Their fear has eclipsed their willingness to try or care. Thus, T.J. explained, the student no longer believes they will have an opportunity to experience success.

Participants agreed over and over: “when a kid is not doing well, there is a problem” (H.L.). Although the teacher can't make a student want to do well, participants see it as the teacher's responsibility to “learn the positive and negative triggers of the kids” (D.G.). They see a responsibility to understand the students' personal and cultural trauma background, and become aware not to trigger any family drama or trauma history (M.K. & P.D.). C.B. highlighted that the teacher also needs to know when to just plain stay out of it. V.R. and R.B. expressed they believe understanding trauma is an essential skill teachers need and an overlooked area in professional development. P.W. has seen that transformative teachers often have an ability to navigate experiences with the students in a way that provides opportunities to heal the trauma, instead of perpetuating it. T.J. talked about realizing they needed to be aware not to retraumatize students, but rather, learn to engage with traumatized students with

careful attention. W.F. believed that students need training in and language for navigating their own traumas as a continual process, not just as one lesson or class. Participants F.M., W.F., V.R., and M.A. believe that it is important to talk about mental wellness, and use research-based intervention techniques on a regular basis. V.R. and W.F. believe that students need to be educated on how learning works, how their emotions and their psyche work, especially those students who seem out of control when they have strong responses to situations. In the daily moments that sometimes get tense and hot out of nowhere, C.P. has found that teachers need to be prepared to de-escalate the situation.

P.D. emphasized the importance of consulting with others who have more expertise, or as F.M. pointed out, having “discernment for when to refer” the student to a more appropriate adult to talk with. O.H. highlighted the need for working with colleagues to improve relationships with students as a team. Being able to do this involves truly taking into consideration “what type of help the kid truly needs” (C.H.), and must be a student-centered process (M.A.). Eleven participants shared that they help make important internal, mental processes more obvious to students through “narrating the situation” (G.A.) by using a mix of “calling out bad behavior” (F.M.) and affirming good choices (N.F.), all while ignoring cries for attention to avoid enforcing poor communication skills (A.M.). Participant F.T. discussed how over time, all of the issues that an individual has in elementary school become compounded by not being addressed until it is too late:

All the issues are exacerbated by high school. By not attending in middle school, if a kid was missing one day, say one or take two days a month. In middle school that’s pretty extreme, but by high school it’s like probably one or two days a week because it’s exacerbated. Or like, the tardiness—if

you're tardy like 10 minutes, no big deal. And then, here, you are like, rolling in third period. And so, for those easy-to-track ones, it ultimately accumulates in the motivation levels. A lot of them are probably working increasingly heavy hours, or dealing with heavier family stuff because they're older and more is put on them. (F.T.)

Without confronting and calling out these issues, they become worse over time (H.L., P.W., C.B., & M.K.). This includes what participant R.B. described as not showing up to learning in a good way because of the "cognitive distortions" that block students from deeply "comprehending real cause-and-effect relationships," particularly in terms of how social and economic mobility work.

Participants, including G.R., F.M., and P.D., shared that while dealing with the wide array of negative behaviors the participants have encountered, it is common to encounter deep resistance to change. I.S. recommended it is helpful to approach resistance with empathy and curiosity, especially to those students who have continuously managed to slip through the cracks. Treating students as individuals continuously deserving of fresh approaches with innovative caring is something M.A. has found that individual teachers are quite resistant to. W.F. and D.N. have seen that this idea is more difficult for teachers to grasp in the heat of the moment, while it is easier to buy into as a broader concept: that students have given up because the system is failing them, not that they are failing because they gave up on the system. Participants agreed that surmounting this issue can take a lot of extra work on the part of the teacher, because they need to come up with a completely new approach that hasn't failed the student before.

Participants, including L.S., V.R., E.C., and M.A., highlighted that this as the reason continuation schools have found success with students: they are on their last chance in school while presented with an alternative education model

using approaches to learning that the student hasn't already failed at. Primarily, E.C. and R.B. credit that students are being presented with a way of learning they have not failed at in the past, they are given a chance to encounter new feelings about engaging in their learning, instead of triggering old education trauma. P.W. though, has found that students are more willing to try because they know it may be their last opportunity.

Participant R.B. emphasized that some “group dynamics are simply a bad fit” or group mix. A.M. agreed: there is a big difference between students who are internalized in their toughness, and those that are externalized—a handful of aggressive externalizers in a class that has several super-sensitive internalizes with trauma backgrounds will quite possibly result in a few tears, or even fights. Often though, the “challenging kids [will] isolate themselves” (F.M.), and it becomes obvious that the “tough kids expect to fail” (C.G.). S.J. explained, “they act hard” and often declare they are “bored,” for one reason or another. H.O. noted the tough kids will always “act out in chaos.” R.O., S.N., and T.J. believe that these are the students who need the most love, regardless of who they have made connections with or how difficult they act to reach.

Participants M.A., G.R., and C.G. recommended not getting angry at what the kids think, ever, pointing out that their thoughts are the product of their experiences and should instead be validated and developed for their truth. Participant N.F. pointed out that “kids believe in rhetoric,” so they “make mistakes.” Participants T.J., L.S., C.B., and M.K. agreed with C.H.’s point: “kids trip, so don’t trip back,” suggesting that teachers remember that their students’

reactions should be responded to with modeling a better way to respond or engage in the situation. O.H., T.J., and C.B. talked about how especially when angry or having lost patience, it is important to “let negative confrontations have time to settle” (C.H.). I.S. suggested that for both the teacher and the student, “it is okay to take a minute,” to step out of the chaos for a breather, if needed. Sometimes, participants agreed, it is needed to “stop and start over” (N.F.), to “try again tomorrow” (A.M.), to “try again together” (F.T.), with the kids, on purpose. Students and teachers need time to restart, students especially need a chance to retry without the expectations they will fail or act poorly again—participants model this with their own actions. Participants, including C.H. and M.K., practice bringing forgiveness into every next moment. I.S. talked about learning to “be willing to turn the other cheek first, over and over.” After all, as A.M. shared, we are all human:

Kids are human, teachers are human; we make mistakes. We don’t know how that’s going to play out in the classroom on a daily basis. Especially for secondary teacher, who may have 150 kids that they are seeing on a daily basis. Like, you can be careful and you can try your best in every single situation, but it doesn’t always work like that. I think, I sometimes feel like, in general, as a population we are so unforgiving, I think, of teachers and the work that they do. (A.M.)

Participants C.H., F.T., and S.N. emphasized that letting students grow and change is essential to them intellectually moving forward—allowing them to suddenly show up differently, so it is normal for them to develop a better way. N.F. pointed out that when students are expected to fail, they often do: a self-fulfilling prophecy. Participant P.D. pointed out that despite what some may feel is a stigma, it is okay to involve a mediator, even if informally. Y.E. and their students practice restorative mediation, through which they have found students

can sometimes even be great mediators between the adults and other adolescents at their school site.

Fifteen participants discussed how, in many instances, the students don't really know what they are saying when they are being hurtful, or trying to. G.R. reflected, "I mean, kids are kids, they can't hurt me, because kids don't know." As participants put it, "kids will try to fuck with you" (C.G.), "kids are loud, they make noise" (T.J.), "they push issues, and push buttons" (C.H.). S.N. explained, "chaos is inevitable, chaos just happens" because, as P.W. noted, many students are "trying to manipulate everything, all at once . . . you just have to be ready to deal with it." C.G. highlighted though, no matter how willing they are to see the students' perspectives, teachers must pay attention so they "don't get played" by the kids' games. Transformative teachers know kids make mistakes (F.N. & R.B.) and can hold their composure in the face of anger (W.F. & C.G.). They can keep their calm to bring together a room that has devolved into chaos (C.B.), and lead a process to make sense of the situation (E.C.), while developing agreements and reparations (S.N.).

Transformative teachers don't give up because they are bothered by the problems they face each day in the classroom (H.L. & R.O.). They know that the students know when a teacher has given up on them (A.M.). So, they "don't give up" (F.M.). Participant O.H. explained that, when a teacher is responsible for over 150 students or more each year, "sometimes you lose; often you figure it out." When transformative teachers are at a loss, M.A. shared, they continue "to fight for the vision," because as D.N. has found, "the kids need to know you mean

business.” When the teacher continues to show up all of the way, the students have something to step up to and match.

What I will try to do is, let them know that I love them, “We can work this out, so, why don’t we talk about what’s up, at a later time? And see exactly what’s going on?” . . .

And there have been times, when, I have had to get, like, “All right!” . . .

And they’re like, “Mr. R.O.’s getting mad,” which, I normally don’t do. When that does happen, the kids know: this is serious. . . .

But I will try to talk to the kid, not talk at him, but talk to him. And try to find out what’s going on. And, take the time to try, and see, “Okay, well, how can we work this out, man? How can we work this out, because, I am not up here, and you down there—we are in this together.” . . .

So I really put an emphasis on, equality, equality, we are learning community, and I am the oldest student and here. . . .

So I handle a tough kid, I just try to show some heart, and some patience, and some love, and some humility, and if necessary, a loving foot in their ass. . . .

Okay—figuratively speaking. . . .

“I love you, but, I’m going to stay in your ass, that’s because I do love you.” . . .

So, I’ll tell you what you don’t want to hear, which is, the truth.

. . . .

And after a while it breaks down, and it’s like, “Mr. R.O. is real, I can talk to him, I can work things out with Mr. R.O.” . . .

You know, I don’t write referrals. But, I will talk smack, and, I will talk smack, I’m can the lecture you, and then you will wish you had the referral. (R.O.)

Sixteen participants identified “pushing” as a strategy for catalyzing student growth and engagement in learning. H.O. reported that when pushing students, teachers must “know when to back off.” Teachers need to know “when it is worth it to push” (G.R.) students to take another step, and “to accept when you can’t” (C.G.). They push when they believe in a student (F.T.), as a way of supporting them in taking scary growth steps. And, importantly, P.W. suggests remembering that inevitably, “kids push back,” so don’t get caught off guard. At the same time, T.J. discussed the downside of what happens when students get pushed too far,

sharing that discernment is needed so teachers to not cross the line, or go over the boundary—“don’t traumatize our students.”

Transformative teachers know “the difference between not liking a student and not liking their behaviors” (G.R.). Participants, including C.H., O.H., and P.D., talked about how, regardless of a student’s behavior, things that definitely don’t work include talking down to the students, punitive punishments, breaking down the student’s psyche, or pouncing on an off-guard student. F.M. commented that using tactics like threats and bribes do not work, and will probably end up escalating the situation. G.R. advocated that strong emotions, like anger, are only useful when accompanied by humor or a sarcasm that students can really appreciate. A veteran teacher, O.H., said, “You gotta know, every year, it may be an uphill battle all year,” while M.A. reflected, “at the end of the year, we will all be tired.” And participant P.W., when talking about being exhausted, said, “but in the end, it will be worth it.” Another long-time teacher recommended, “Pick your battles wisely, and choose the hell you are going to die in” (C.G.). Participants I.S., C.H., and M.K. agreed that when working with students in difficult situations, it is always wise to leave space for forgiveness. K.I. recommended finding ways to move intellectually forward even if that means coming back to address the situation later.

Many of the students that participants work with are not coming from socially privileged backgrounds and because of this, participants, including K.I., S.J., C.H., G.A., and P.D., emphasized that it is essential for teachers to understand that the biological markers and psycho-social scars of structural

violence and systemic oppression sincerely do impact a student's ability to do well in school or become academically successful. Some of the students are really born addicted to crack, as G.A. has had to confront many times over decades of teaching. Some students have developmental disabilities as a result of malnourishment, neglect, and trauma; for many of these students, the options of what is possible for their lives is maybe not as varied and simple as for most (G.R., I.S., & L.S).

Some students are simply cognitively low for a variety of nature-versus-nurture debates, and some participants, including M.K., E.C., R.B, P.W., and V.R., have experienced that forcing academically struggling students to go to college, or setting them up to feel like a failure for not being capable of benefiting from college, is perpetuating oppression. Participants agreed with L.S., who lamented the California A-G requirements. These are a set of mandated credits, broken down by subject area, which a student must fulfill in order to receive a public high school diploma in the state of California (California Department of Education, 2018). The requirements leave little-to-no room for choosing a career track on purpose, with the intention of preparing every single student for college. SFUSD does not offer students opportunities to pursue a technical or labor career as an acceptable alternative goal to college.

You know, there's nothing wrong with having a technical background. And, I think that a lot of these kids, and a lot of these vocational ed. teachers . . . are different. The guy teaching metal shop or . . . building, you know, they might be straight talking—clear—they're not academics, they use plain language. . . .

Because you know, if you're not getting pay attention to me, jackass, that car's gonna fall on your head. . . .

And all of the sudden, the kid with ADD, amazingly enough, focuses. Because you know what, if you checkout in this class, you're out, gone, we've got a waiting list to get in here. . . .

And so, that kind of real world, and that kind of straight talking people, who are straight shooters, I think there's a value to that. And it makes me sad that that's not offered to some of our kids. That makes me sad. . . .

And the other thing that we had was a beauty school, so they could get their cosmetology license by the time they graduate high school. Or they could do the secretarial, they could do [programs for being a] med tech, . . . or or vet tech. . . .

And I'm afraid that the kids . . . in my classes are not to make it to city college; and I feel for them because, they look around, and there is nothing. They come to school basically socialize. . . .

And some of them, I give them such credit for showing up, because it would be like, me going to the University of Iran—taking physics in Arabic. . . . Like what the hell am I doing here? There's no way I am going to do well. . . . But they show up every day, most of them, they come to school. So I think that's a big piece. . . .

And I think, that this is where people have a valid point with saying that we have become too politically correct—lets all hold hands and pretend that everybody needs a four-year college degree. . . . That's ridiculous. I think the kids that, you know, we had cosmetology or hair or I just think there's value in that. . . .

And one thing to be careful of, is a lot of people end up in the food industry and restaurants, because they have no other training, and, you have to be careful because they aren't well-paying jobs. . . .

I think especially for our students that would have to take out loans to go to college, or special training. This is the place that they should be doing it. This would keep them coming. . . .

If they did consumer math, and reading a contract, and setting up those business dreams. Like, if in the morning there was learning with a purpose, that would be their project, how do you run a small business, or do your research. And then, in the afternoon, get training that eventually leads to apprenticeships. . . .

I just think we're missing the mark, and that gap is where kids fall through the cracks, and they end up in a really bad places. (L.S.)

This expectation results in students with low academic skills developing a negative self-image from feeling incapable of being successful of a goal that is considered an attainable standard. Instead, participants talked about working to create options for students based on what “will help them in their life right now” (P.W.). T.J. stressed, they need their education for today, “not a hypothetical

future that they may be able to reach if every single thing goes right”—if by some miracle the student is able to beat the statistical odds stacked against them. G.R. posited that because students have incredible neuroplasticity, given the right circumstances, any student can remediate their academic skills, and will be able to rise to challenges when motivated. However, there are other students for whom it is simply too late: they are not willing, or they will not benefit from a four-year college; these students deserve to be presented with respectable alternative options that enable them to experience success through a career path.

Cocreative social reconstruction.

The primary purpose of this study was to explain the process of how teachers transform the limiting learning-related worldviews of students as a result of teacher–student exchanges within the classroom environment, as it is already happening. The term, “limiting learning-related worldview” is defined in Chapter 2: Literature Review. Participants identified that by “keeping it real” and “inviting kids to be real” (G.R.) in relationships with their students, the teacher is able to facilitate and provide support for “navigating real life” (N.F.) through addressing limiting learning-related worldviews on a “day-to-day, minute-by-minute basis” (O.H.).

As O.H. explained, teachers constantly have subtle or obvious opportunities to question students on low self-efficacy beliefs, poorly thought-out perspectives, or inaccurate assumptions about the world. M.A., a veteran teacher and administrator, highlighted that some individuals are simply not self-aware or conscious of doing this type of self-reflecting for themselves; thus, they are

simply unable to do it with their students. F.T., L.S., Y.E., and M.K. agreed that students have fears, beliefs, or assumptions that prevent them from engaging in social and learning processes, and believe that transformative teachers must recognize their responsibility for addressing these fears. C.G. shared it is usually pretty easy to identify blocks and limits to learning because, in every moment, students are acting and communicating in ways that express their worldviews. Eighteen participants discussed that teachers can either passively or actively engage in addressing these limits—some issues require direct conversation to find and reconstruct a limiting worldview, while others are more obvious and can be addressed indirectly through managing classroom dynamics. Sometimes the real obstacles to learning can be tangible or nameable, but not all are:

There are always kids that hate working in groups. They just hate it. If anything, little by little, they cave. I've had students who outright refuse to work in groups. Sometimes, a group is just two or three people. So then, little by little, no matter where they go, they will be expected to do it. . . .

So, they're finally like, "Okay, I just have to do it." . . .

I had a girl that would not be in groups; now she's in another project, but she wants to be team captain of every group she is in, apparently. So, that is a change, because she just would not, she hated it. (R.B.)

As seen in this quote, the teacher wasn't entirely sure what changed, but it was clear that by moving into a different group dynamic, the issue blocking the student from learning dissolved.

A.M. recommended that most students need the teacher to call out how the limiting worldview is showing up. V.R. shared that often the teacher has to "name it" or identify what the resistance is before the student can even see it. W.F. has observed that for some students, a limitation can be as simple as not knowing they could take a moment to slow down and reflect, feel themselves at center in their

body, become all the way present right here right now, and block out what is going on around them on purpose—a technique W.F. uses to help students prepare to get started. A student may not know they could, or how doing this on purpose might be the simple thing that helps them to slow down enough to see a situation from another perspective.

Many participants, including L.S., P.D., M.K., and A.M., talked about a common scenario. Imagine a student with complex trauma that wants to do well but doesn't realize they are the person derailing the entire class because they are having hard feelings about something unrelated to school. The student is pacing around the room, touching people, messing with their phones, having side conversations, all in order to avoid their feelings, like anger, sadness, or self-doubt, that scream in their mind when their body becomes still and quiet. Yelling at or scolding the student might trigger whatever is bothering them, but quietly offering them a check-in, space to settle down, or a task like cutting papers, could help them shift gears and be a little more present in the lesson. Transformative teachers have discernment around what their students need in order to relieve agitation, whether it is arising from cognitive dissonance, internal emotional conflict, or a combination of factors.

Supporting students through the dark moments, when it is not only about content mastery but also self-mastery, is something at which, M.A. explained, transformative teachers excel by bringing their best face forward in moments when others give up. Nine participants agreed that it is up to teachers to build and provide support that allows the student to feel okay moving into the unknown, to

enter the sometimes identity-destabilizing process of consciously changing the worldviews that prevent them from growing. Participants, including L.S., S.J., C.H. and T.J., reflected that when the relationship is there, transformative teachers are not afraid to personally get involved with a real issue to help a struggling student. P.W., T.J., W.F., and C.H. candidly shared that however unfortunately, real incidents do happen in the classroom and need to be addressed because—in both positive and negative situations—students and teachers both need their experiences validated, errors broken down, good responses highlighted, and a real sense of closure to emotionally integrate before moving forward. G.A. suggested that students need teachers to go first, to be brave enough to openly talk about their experiences that made them feel vulnerable. Teachers need to see and look for their students' humanness (I.S.) in a way that honors and lifts up the students' honest experiences that have had meaning for them (P.D.). Instead of belittling or talking down to students for having limiting worldviews, participants F.M., S.J., V.R., and 10 others referenced that these become the fertile ground for teaching students to see how they habitually make sense of their lives, and opportunities to develop more empowered abstractions to move forward with.

Seventeen participants discussed that, through being aware of how students are assigning meaning to their experiences and then challenging the way students are assigning meaning by offering additional information or overlooked angles, transformative teachers support students in constructing a new perspective. C.G., R.O., and C.H. concluded that providing, new, “accurate information about the world combats ignorance, naïveté” (C.G.), and oppression,

which develops “empowerment through increasing consciousness” (R.O.). For example, O.H. shared that one of the greatest limitations to a student’s awareness is the mainstream narratives that are used in perpetuating oppression. O.H. said teachers must “address that the mainstream narrative is biased” by using accurate information to combat each piece of the story. G.R., G.A., and E.C. shared that teachers do so through renegotiating the meaning made out of stories from which students source their beliefs, values, and assumptions; this provides alternative contextualization to see and incorporate perspectives they have not been previously exposed to. Participants, including E.C., S.J., and T.J., passionately emphasized the importance of disrupting the Eurocentric colonialist agenda of U.S. education by refusing to teach using stories that affirm the White patriarchal paradigm. In other, more simple, words, teach using authors who aren’t White. O.H. explained that this is not always an explicit class or lesson, but can happen, constantly, through the day-to-day conversation and rapport that builds amongst, through, and between content lessons.

C.G. reported that it is a common misconception to believe students do not want to be challenged: teachers ought to “assume kids do want to know what is really going on in the world” (C.G.) and want to “learn to be informed citizens of our extraordinarily complex social system” (R.B.). S.J. highlighted that it is essential to “assume that students want to go to college, or at least want to be educated.” D.G. shared the frustration with colleagues who can’t seem to see that their students really do “want a nice life” (I.S.). Although students may not understand what goes into living the life they dream of, they still do want the tools

to make sure they can get what they want out of their life. Participant C.B. recommended that teachers enjoy real, open, and honest bidirectional communication with students as a whole and intellectual person.

Teachers need to share multiple perspectives on situations that are happening locally and on a bigger level, while being transparent and showing respect for the students' thoughts. Participant O.H. recommended, "Be brave in talking about real issues and hard topics, in context, with a process and boundaries." F.T. believes that transformative teachers open a space for students to ask questions they might not dare ask someone else, while maintaining healthy boundaries for a classroom container. Participants V.R., R.B., and M.K. shared that for some students, they have narrow beliefs about what is possible for them in life and need teachers to directly explore their options with them, to help them develop a new, broader vision for what might be possible. E.C. offered that this can include supporting their students by finding and helping them to enroll in support programs, or by simply brainstorming ideas the student may have never known were options. L.S. and P.W. have found that feeling confident in doing new things, or even knowing other viable opportunities exist, is a challenge for students with limited exposure to varieties of experience. Participants, including D.G., B.M., and G.R., have seen that students with limited exposure to approaching new experiences often also display anxiety with struggle and are uncomfortable correcting their own errors, even with support. Participants K.I., P.D., G.A., and D.N. agreed this is likely a result of low coping skills and low

resilience, which are needed to experience repeated failures, re-evaluations, and changes in approaches to lead up to a success.

Participant F.M. reflected that students don't need teachers to hide the ugly truth of the world from them, because most of them are already living it. C.H. has found that "it's okay to be a little raw; raw is okay sometimes." R.B. shared that their students already know that "life is not a drop in the bucket." G.R. said that they "don't need teachers to be right, they need teachers to be real." K.I. focuses on showing students that there are multiple ways to be right. This cultivates the trust and healthy boundaries that make it possible to "ask students to correct bad vibes" (C.H.), rethink behavior, or start fresh when things inevitably get tense or difficult. D.N. recommended that teachers "show kids what's possible" by exposing them to a variety of worldviews. Participant R.O. makes it a point to "show and talk about holding multiple worldviews" through designing lessons that ask students to compare and share thinking. S.N. argued that exploring, confronting, and questioning a student's thinking and worldview "empowers the kid to refuse to accept what they don't understand." S.N. elaborated that they believe this empowerment develops because students will know what it means to understand without blind acceptance, and the risks that come with unchallenged stereotypes or subconsciously adopted worldviews.

Empowerment through voice.

N.F., after over 15 years of teaching, has concluded that the lives of the students in SFUSD are not like the lives of their teachers. Participants stressed that teachers cannot "be afraid of their students' lives just because they are living

out the pain of oppression” (G.A.). R.O. and T.J. highlighted that in their experiences, Black empowerment sincerely triggers and intimidates non-Black people. G.R. explained that that historically and undeniably, for generations, empowering the average person and the impoverished has intimidated people. I.S. and V.R. emphasized that teachers need to truly understand that real life is happening to their students outside of school, and it is hard. P.W. stressed with importance that teachers must recognize that hard gang violence is real, no matter what it looks like while the kids are at school. “The kids are fighting demons bigger than them,” walking streets many teachers would never go down; “these kids are just surviving” (T.J.). And, at the same time, teachers are not here to save the kids, because teachers are not saviors.

I started working in like the Bayview with kids who had rough lives. Right? And, I think even as a [teaching assistant] you want to go in and save them, or something. After a very short amount of time, especially after being a teacher, that is such a load of shit. And it is a terrible reason to be a teacher, because you’re going to get shit on again, and again, and you’re going to get that shoved back into your face over, and over. They don’t need to be saved from their life. But it’s just like, that’s an awful reason to be a teacher. (S.N.)

Seven participants talked about the importance of not victimizing students to their own lives. C.G. explained, “teachers are not saviors . . . they are not saving the kids.” Teachers are here to resolve the victim mentality and do students “no service by projecting their own beliefs about the students’ lives being tragic” (A.M.). W.F., P.W., and H.L. have found that when teachers start attaching the victim narrative to their students’ lives, the rhetoric then becomes the following: nothing could possibly be done to remedy the huge issues creating social injustice

because the problem is simply too big and overwhelming to ever overcome. And then, people give up.

Instead, S.J. recommended that teachers “have awe for what their students have overcome.” C.H. focuses on “honoring their lives” and feelings by helping them make sense of their experiences through empowered narratives.

Transformative teachers help students negotiate new meaning (F.T.), through asking questions like, why and why not (D.N.). Transformative teachers honor their students’ lives by empowering them and creating space for them to speak about and be proud of the challenges they have already overcome (B.M.).

T.J. declared, “empowerment *is* transformation.” Participants defined empowerment in several ways. Empowerment is taking ownership over one’s own life by becoming confident in navigating the unknown (G.R.). Empowerment is developing a revolutionary mindset (M.K.) and becoming a thought leader (O.H.). Empowerment is release from self-pity (E.C.); it is rising to meet one’s own life (S.J.). Empowerment is becoming owner over one’s own knowledge (H.L.) and creator of one’s own future (R.O.). Empowerment is no longer accepting a victim role in the unfolding of life and making choices based on one’s own preferences, having goals (S.N.). Empowerment is when individual’s learn they can choose to get what they want out of their lives (W.F.).

I think we do show them a different type of learning, and that’s why our [project based curriculum and variable grading] model is so unique. We have five different pathways. They can choose and they can pick something that they actually like, that actually speaks to them. The really good outdoor program is only on campus one day a week. They run a ropes course, they built a boat. They are hard-core outside, for some kids that’s great. Some kids like being outside, but don’t necessarily want to go backpack for 10 days. . . .

Still, some like structure and having a place to come, but can only handle so much. And then there is the drama project, the music project, and “the city” is all about learning about where you’re from. There are all these different avenues, and some of the kids just want to come into the building. They don’t want to meet off-campus, they don’t want to be outside and be dirty. . . .

So, I think that’s part of what is empowering, showing a different way to learn all the things you need to learn. We are not trying to make you dizzy, but to really give you what you think you need. If you really just need to work on a few things, then like, we think, “It’s just a little bit of P and L, then we are gonna focus on that target, so go really deep into D, K, and F now. And if you only know a little bit of this, but can find more about it, and a little more about that, then see, it’s fine, your going to be okay.” . . .

And, the point is so you can have the tools that you need. So that you are empowered to move through the world around you. I ultimately believe that I would rather have them leave here and be empowered. Whether or not that’s with straight-As, and all their credit; Versus empowered and being able to access the world around them in a system that has historically oppressed them. I would much rather they are empowered to have a voice, and take initiative over that. It’s way better than leaving here, going through the roof at City College, but then continuing to play into systems of oppression in their everyday life. (R.B.)

Opportunities to transform are empowering (T.J.) and creating opportunities to transform through empowerment is an act of activism in systems of oppression (P.W.). Participant O.H. has seen that teachers who create these opportunities are modeling being empowered activists with their students. And those who don’t are participating in a silent violence (S.J.).

Fourteen participants correlated that when teachers support students to find their own authentic voices, students become empowered and transformation happens. I.S. explained that in order to empower students to know their true voices, the teacher must first know their own truth and model speaking it in a good way, for students of all backgrounds. Transformative teachers like P.D., B.M., C.B., and G.A. know that having an opinion, or being able to truthfully express what can be seen from one’s own positionality in a way others can

understand, is powerful in society. O.H. has found that by speaking truth in conversational rapport with their students and expecting their students do the same, a deepening in relationship is built through trust and students begin to communicate their thoughts more honestly.

Transformative teachers work to support students in their native language, like Spanish and Chinese, and often are adept in the local slang. Participants have seen how English Language Learners (ELLs) are less likely to be encouraged to use their voice as often.

They would go through their class day really quiet, probably not a student who spoke up. Kind of invisible in the community. Okay with teachers, as long as they don't call on me. I'm not going to self-advocate, because I might not have the language for it. Or, I'm socially awkward and don't want to speak up. Know that is their experience for the most part. . . .

When you're in a larger class, it's easy to be invisible. But, the parameters teachers set up, or how we combat this systematically, how to create a space for them to speak up, to read and write academically. They need to learn language and they're not going to build it if they disappear into the crowd. And they are going to show up every day. . . .

Some kids are in a quiet stage. And, they don't have the words to talk about ideas in their classes. And so, they think that if they're just quiet long enough, then teachers will assume they don't speak English, or they are stupid. They need a lot more wait time when reading academically. They need to read it slowly until they process it, translating many words, the teacher being really intentional about giving time for that. Teachers need to hold them to extreme expectations and participation structures, so it's their turn to speak for two minutes, "Go." Just being very, very, intentional about it. (F.T.)

Participants pointed out a significant shortcoming in language skills among their students, which includes native English speakers as often as ELL students.

A negative side of empowerment through voice that was raised by participants is how many teachers and administrators allow a student's illiteracy to go unaddressed. M.A. argued that it is the teacher's responsibility to see through students' literacy limitations to reveal and develop their voice. F.M., G.A.

and others expressed that teachers are failing their students when they are unable to recognize and support students who need literacy remediation. M.A., T.J., S.J., and E.C. believe that teachers are failing their students when they do not continue to engage the student in developing their intellectual voice—regardless of their literacy level. C.H., M.K., and F.T. explained that helping the student develop their intellectual voice often motivates students to improve their literacy skills. L.S., a long-time teacher and literacy specialist, said

Continuing to see a student’s illiteracy around language and then not making it known to the student, their family, and the school is participating in systemic oppression because, by omission, the individual is not initiating the process of working towards remediation.

Transformative teachers, like S.J., F.M., G.A., and R.B., understand that illiteracy or developmental disabilities are legitimate handicaps that need to be accommodated for in order to learn. Participants R.O., T.J., M.A., and P.D. pointed out that schools and districts that chronically underserve kids—that are pretending to (but not really) teach their students—become this way as the result of unexamined intergenerational and intercultural racist, classist, oppressive views. S.J. explained that being nice to students “by letting them off the hook” or not holding them to rigorous expectations for communication is not empowering. Being able to use language that more accurately describes one’s own experience that is empowering.

Transformative teachers push for using better, clear, and kind words in such a way that new value is given to the language the students use:

Well, I try to do a lot of modeling. Like in the beginning of the year, this group has been very challenging in terms of their language with each other and, one girl would be like, “Shut the F up.” And I would be like, “Okay, so I see what you want, I understand you want them to stop talking and

you are annoyed, but can we phrase it differently, in different language?” When the kids switch to, “Please be quiet,” when they use the appropriate language, I celebrate it and it becomes the thing that’s like, “This what we do in this class, we do this on purpose.” (D.G.)

Teachers show students how to articulate their truth by taking care to use their words to say what they really think and believe, instead of avoiding hard situations using a pre-scripted answer because it is easier, or more appropriate and official. R.B., A.M., D.G., and V.R. emphasized that it is important to provide flexible conversational scripts for communication using better language, and examples for how to reframe language when code switching, such as the teacher re-saying the student’s message in different terms, while keeping their intended meaning, like a translation.

Twenty-four participants have found that while their students do not come in with the vocabulary or the contextualized understanding to speak about their experience from their own positionality in an empowered way, “they do need an empowered voice so they can be unafraid to self-advocate” (T.J). N.F. said that students have the right to be able to ask questions, to have the words to ask for explanations of what they don’t understand and “to doubt the status quo” (C.H.). L.S. pointed out that learning to use language in varied ways provides students with the skills needed to be socially mobile, and able to communicate with a greater diversity of social or cultural groups.

We explicitly learn about code-switching, because that’s a huge tool. A huge tool for going off in the world, and you really need it. You know you really need it, and when you’re going to be a change-maker, you will need it to go to your principal or your boss. You wouldn’t talk the same way you speak with your best friend on the street. (Y.E.)

Transformative teachers, like E.C. and M.K., show their students how to use code switching in order to create a meaningful message for their audience. Teaching code switching is social justice that must go in two directions: First, shared participants (including F.M., N.F., W.F., and C.B.), teachers must talk in a way their students can meaningfully understand, using language that makes sense in context for their students so they can gain the needed information from what is being communicated. M.A. highlighted the importance of honoring how and why a student shared their thinking by using their actual wording and language in discussion, however, there are times when it is appropriate to help students find better language for communicating their thinking. D.N., O.H., G.A., and L.S. actively practice rewording what their students have explained with better language, which models language that shares their message while overcoming social markers and language cues, which would make them a target of oppression.

So to be like, “It’s okay if you curse in class, it’s okay if you don’t use good language” . . . it’s just, below expectations for me. . . . I think that that is selling our students short, and I think it’s lazy. I think you can find better ways to connect with your students through fostering better vocabulary choices. . . .

Like, I curse all the fucking time, I cuss when I’m coaching, like, I use slang to get my point across faster, which I refer to as code switching. But, I don’t in class. . . . During lunch, it’s maybe, cuss cuss cuss, some slang, common dialect. But, once we get into class, it’s down to business. . . .

Learning to switch on purpose into using a variety of language to explain your experiences, with good descriptive words, is a valuable communication skill, instead of slang and space-fillers like profanity. Not teaching code-switching as a skill, that is a social injustice. (S.J.)

Participant C.H. talked about using slam poetry to foster their students’ ability to use their voices for talking about what matters to them, what hurts them, and what drives them. Learning to use words in new ways opens new doors, and new words

“foster the voice of activism through art” (C.G.). As T.J. put it, “a pen is the most powerful way out”: transformative teachers foster linguistic skills that result in a clear strong intellectual voice. Providing constructive feedback on student work shows them how to hone their voice and critique their own thinking; but, R.O. warned, do it without “squashing the their spirit.” M.A. was clear: learning to edit and refine thinking upon self-reflection will develop an empowered voice through their own intellectual work and students will continue to use it for self-advocacy throughout the rest of their lives.

Teaching Systems—Theme: Facilitative Real Model

In a world of social media and constant image projection, where people become famous for being a model of a human in one way or another—which, R.B. pointed out happens regardless of ethical constitution—adolescent students no longer need role models for teaching them how to fit into pre-existing societal roles and boxes. They need real models, real humans that live a real life with integrity, who honor transparency and showing up with all aspects of self to the furthest degree appropriate for the situation.

More than just teachers in the classroom, real models show how to navigate experiences and different ways of moving through the world, ways students may have never considered or witnessed before. Real models show a new way to think about or approach real-life situations that do not fit the standard role models students are used to. One participant explained this idea very clearly:

I get fulfillment by helping [students] have allies, and having them have positive role models. And I’m not a role model, I’m the *real* model. I

mean, they do things that I do; they might be younger, it's just *that* kind of transparency we have. A lot of them only see this fake shit on TV, these fake rappers that don't do anything that they talk about. I tell them, "Hey, this tattoo means this, this scar means that." I don't come in here, all tryin' to front, and kick it. I'm not trying to impress them with my shirts and ties. I'm not trying to make them be like, "Oh, he's so powerful." . . .

I want them to see themselves when they see me. I want them to see a way out. I want them to see transformation. I want them to see that if you put your mind to it, and you push yourself, everything you've ever dreamed of is yours. And that's why we explore really strong quotes, really strong literature, really strong examples of what it means to overcome. . . .

I think so many of my students have come to school and felt like it wasn't for them—education is an opportunity to get them to the next level of basketball, and football, and rap. They used to think these are the gateways out, but now it's your brain, it's what you carry in your mind. Once you pick up that pen, it is the most powerful thing you'll ever have.

. . .

If [other people] don't like you and think you won't be able to stand up, they will lock you up in jail, and make a slave out of you. Fuck that. They fear you with a pen. Because your pen is a sword. You can move mountains, you can transform our minds around that. You can lead, and they are afraid of that. And, I really try to implement free writes, and lines, just give me thoughts on this, or quick out loud, "tell me what you feel about that right now," on the spot. (T.J.)

Facilitative real modeling.

Twenty-eight participants shared the conclusion that regardless of a teacher's desire to be a real model—or their awareness that everything they do is demonstrating some lesson to their students—they are always modeling, consciously or not. "Real models are mentors" (C.H.), real models are living example that there is a way to walk in the world with intelligence, a positive attitude, and kindness. A.M. has found that "walking the talk is the hardest part." Participant C.B. suggested showing students they can begin again in each moment, with a fresh breath and a desire to move forward—it is the teacher's responsibility to "reflect back a better way." Participant K.I. has observed that if a person can't do something, then they simply can't teach it. I.S. believes that if

they want to teach it anyway, then they will need to find a different way to model it, like inviting in guest speakers, showing videos.

I bring together a panel of different women, and each member of the panel tells their story. This is all through an organization called IGNITE: Inspiring Girls Now in Technology Evolution. They each tell their stories, and then have a question and answer session with the girls. The students get to actually ask questions about [the presenters'] experience as women. Like, you know, my experience as a woman engineer. Girls want to hear about what's it like to be a woman and a professional. "Were there any challenges that you faced? When/how did you decide you could do this?" (I.S.)

M.A. argued teachers need to learn more about the areas where their knowledge falls short so that they will be able to teach it. W.F. said that, most importantly, transformative teachers must practice what they preach to demonstrate aligning their intention, words, and actions because this consistency has real impact on students.

Regardless of a teacher's awareness, participant (C.B.) explained that they are constantly modeling ways to interact and engage with each unfolding moment on multidimensional levels, in concrete and abstract ways. Six participants emphasized the importance of being intentional in everything one does: students are watching how teachers interact with other students, and how the teacher is overcoming setbacks both socially and intellectually. I.S. has experienced that students need to watch how teachers facilitate problem-solving approaches both in and out of the classroom container. D.G. explained that students need teachers to show them how to handle uncomfortable or unfamiliar situations.

If you teach in a way that is disrespectful to people, then you are teaching disrespect. If you don't use what you believe in your teaching, you are teaching the opposite of what you believe in. So, I believe that people should respect each other, and that means that I should always try and respect the students. Which means, if I make a mistake, I don't sit

there and say, “Oh I didn’t make a mistake,” I say “I’m really sorry, I did make a mistake, how can I make it up to you?” I do what I can to fix it, because I want to model what I want from the kids. (F.M.)

Five participants described that they practice self-regulation and narrate ways they navigate inner conflict. Participant Y.E. talked about modeling for students how to forgive others and create closure. K.I. emphasized that it is essential to show students how to navigate power dynamics and how to not give their power away to others. They demonstrate having boundaries that feel good and are still functional (B.M.); they show students how to have self-care in the moment (S.J. & A.M.), and how to have self-love in a highly critical world (M.K).

B.M., a younger teacher, spoke about her own personal transformation that she went through as a result of realizing how deeply she was a real model for her students. She realized she was affirming a beauty standard that she did not agree with to her young students, who she wanted to be a better model for. She reflected:

I want, I also want [my students] to . . . it’s a self thing, like you know, working on your self. Here, right now, I’m actually going on a journey with myself, to be appreciative of who I am. And, you gotta start with your hair. And, that’s why I feel like, okay, how am I gonna embrace myself? How am I gonna liberate myself if I’m not like, you know, accepting of who I am? Like, accepting of my own beauty? . . .

And these young women are looking up to me. How am I gonna be able to teach them something, and they not feel that cause I’m doing something totally opposite? You know? I have to be that model, and that person that they look up to and see, you know? Like, not saying I’m always gonna be somebody’s role model but—I wanna be that real example for them so that they can be, so, they can be so liberated. That they can be like, “Ok, I appreciate myself, I love myself.” Self-purpose, you know? Like, that’s the thing, “I can rise above,” like, you know? So. (B.M.)

Participants I.S., C.H., T.J., V.R., A.M., and G.A. believe teachers need to have transparency around their own transformations, those that may have happened in

and out of their teaching life. Participants P.D., C.B., D.N., D.G., H.L., and Y.E. said that day-to-day transformations come from teachers' self-reflection and re-evaluating how they are showing up and engaging in the classroom.

T.J., A.M., and G.A. talked about the how they felt it was important for them to be all of themselves, the same whole person inside the classroom that they are outside of the classroom, because they are modeling for the kids to be themselves. M.A. emphasized that teachers must find a way to share their real selves with their students, not being able to do so could stop someone from being a successful teacher. V.R. agreed that it is important for teachers to talk about and describe their own "journey to success" (I.S.), and their own process of defining what success means for them as an individual (K.I.). Participants explained that transformative teachers model stepping up, taking responsibility, stepping back, and then creating opportunities for others to step up. C.B. has found that transformative teachers work on themselves, and practice "reflecting back a better way" to their students in every moment of communication, as part of everyday rapport-building. I.S. and D.G. talked about how attitude is a choice. T.J. said that a "good attitude comes from realizing how brilliant and beautiful you are," so cultivating their good attitudes is done by creating ways for them to see how brilliant and beautiful they each uniquely are.

A topic continuously raised by participants was language. T.J. highlighted that "words do have meaning," and language consciousness is essential both in communicating clearly and modeling. Participant I.S. learned how to communicate better with students using tools like neuro-linguistic programming.

R.O., M.K., P.D., and S.N. have all studied narrative reframing techniques. O.H. finds they have been able to provide better language to describe what is happening in the moment, when they talk and reflect about real-world situations together. Participant H.L. coaches teachers to approach scenarios from multiple perspectives by modeling inquiry-based concept development for making sense out of situations by asking questions and building ideas onto each other. Participant K.I. recommends practicing teaching key concepts with colleagues before going into the classroom to teach students.

The more times that you have to think through the problems with another person ahead of time, the better. You'll see more ways of doing it, and you don't think the same as someone who has a math background; and a psychologist has a different way of thinking, that might not necessarily be the same procedure that the student might be thinking of. Then you can have different mental models for how to approach the problems, so you can present it to the next students in multiple ways when they are stuck. (K.I.)

Participants, including G.A., L.S., and D.G., explained they show students how to think about and analyze situations in ways that consider alternative approaches through telling multiple sides to a story. M.K. and E.C. use dramatic readings to add or remove aspects and nuance to the narrative story, breaking down language into more digestible bits when students are confused. L.S. retells the story or information with the subtleties laid bare, leaving little room for students to wonder or need to draw conclusions, to confirm their understanding.

Teachers aren't just modeling communication through words. S.J. said teachers are also demonstrating appropriate ways to convey emotions and feelings that come through more subtly, like in tone or posture. C.G. and A.M. emphasized that extreme emotions are for positivity and enthusiasm, while W.F. talked about

how it is important for the teacher to work on having their hard feelings in a good way.

I think for me, I have extreme emotions but I keep them more reserved for positivity and enthusiasm. I get pumped up. I get to be excited. I make dumb jokes. It's kind of that, the thing I try to model for them is, the notion that, you fucking have to work. I don't care what you work on, if this isn't your jam that's fine. But, unless you have a billionaire as a daddy, you're going to have to work—so let's get into it. There is no point in hating it if you have to do it, so enjoy it. And let's make the most of the situation we are in, if you're going to come to my class, let's make the most of it. (C.G.)

D.N. and M.K. agreed that they like to use student work as models, to provide “a sense of what is truly possible in a tangible way”(N.F); “students like to see the level of what others can do” (M.A.). By offering students different examples of what is possible, they can see different ways to access learning they may not have seen before.

Transformative teachers know many of their students do not yet mentally have the tools to think about ideas they have never conceived of before; A.M. discussed that it is central to plan for how students will deal with new information in their mind. N.F. explained that the mind naturally builds mental models using imagination when learning, but when students try to fit new meaning into existing models and it doesn't quite fit, they need to be provided with new models for new thinking possibilities.

Kids come in here, being like, “All I care about is the answer.” But, for me, I care about the questions. I'm asking questions around mathematical thinking, or the way you have functions that fit together to create statically pleasing shapes, because there's no right answer to that, right? There's so many different ways you could do that. . . .

We just did a research project where kids research their own data, and made micro models to predict macro future patterns. It wasn't a yes-or-no question. Were the final models wrong? It's a gray area. We talk about how, this model looks okay for these reasons, while this one looks

bad for these reasons, and here's our mathematical thinking around this. So, no kid is going to get the perfect model done, knowing that we don't actually know. But, we can make a pretty good mathematical estimate of action, based on upon knowledge of the situation. . . .

And, the kids were comfortable with that—that made sense to them, that mathematics isn't a foolproof model to make sense of the things. I think, it is important to expose students to the full domain of mathematics, because when they come in, they may not necessarily have had exposure to the world. And, math doesn't have all of the answers, but, mathematical thinking really helps. (N.F.)

Teachers use tangible and mental models that break down ideas or work into manageable pieces, so that students are able to learn how to organize their own thinking (R.B. & S.N.). In following steps for models of concepts, a clear explanation affirms or corrects the students' developing construction of the mental model (R.O. & D.G.).

Roles of the facilitator.

Participants L.S. and S.N. agreed with T.J., who explained, “teaching is the front line of a silent war” against oppressive systems that perpetuate -isms, and “psychological poverty.”

I firmly believe in doing antiracist work as a teacher. To me, I think sometimes, schools are like, the battleground for all social experiments. Race and class and gender and everything that people study, and everything that people have fought so hard about. It plays out here. I think that's really exciting, and really challenging. There's a lot of stuff going on as a teacher. (D.N.)

However, participants like S.N. did not all consider themselves “social justice warriors,” and moreover, all teachers are “not solving social problems.” Still, these participants did acknowledge that as a teacher, they are in a position to have an impact on their students' futures. Teachers are professionals that need to “be prepared to deal with [their] population of students” (R.B.); it is the teachers' responsibility to be ready to confront the challenges with their unique population

of students. L.S. highlighted that it is important for an educator to take pride in the education they are providing. Participant A.M. takes extra to be cognizant of working with all of their students in a way that “helps them for right now.”

Participants named many roles or hats they wear as teachers. The goal of shifting roles, they agreed, was to support students in taking ownership over their education and lives. Teachers can take on a role for a short period of time (W.F.), and sometimes they need to take on multiple roles at the same time (F.T). Sometimes teachers act in the role of a parent (C.H.), mentor (B.M.), curator, or experience creator (G.A.). They also may need to be a facilitator, resource manager (H.L.), or social situation counselor (P.D)—all in one class. Participant R.O. pointed out that although teaching is a purpose, it does not automatically make teachers truly in charge of deciding the purpose of learning for the kids.

The teacher is never really “in-charge.” A lot of teachers make the mistake, that, they think they are in charge. And, no. If you are brand-new, you have to earn your trust with these kids, and earn their respect. And once you do that, that’s half the battle right there. But, a lot of teachers make the mistake of, “I’m the adult, so I’m in charge.” No, no you’re not, no, you’re not. You’re lucky if they let you talk when they don’t like ya. Okay? It’s a new day and age; it’s not like decades ago, when I was a kid, when the teacher had absolute power. (R.O.)

G.R. offered that the teacher is acting as the catalyst, in whatever role they take on. They might be a bubble-burster, a truth-teller that deconstructs the way a student was hiding behind their fears (M.A.), or the person that helps them finally move forward when they were about to give up (B.M.). F.M. has seen that the teacher is often the first person that ever asked the student to question the way they were making sense out of the world, that “helps them see a way out.”

Fifteen participants pointed out teachers need to take on different roles of support in order for the student to succeed—or, they help students get the things they need in order to be successful. L.S. said they focus on showing students how to take that step they aren't sure of. Participant P.W. explained that transformative teachers aren't always popular because they are the very catalyst instigating sometimes-painful self-development.

The teachers that have the most impact on the kids are the ones that push them the hardest. And, so, if you're in our classrooms, we are not going to be the most popular ones. We are not the ones that have the easiest times with the kids. We're the ones that are pushing kids and saying, "No that's not good enough, you have to give me more, you have to do better." It's those teachers at the school that really pushed, that I really feel like are the more transformative ones. Because, they show the kids that they can do more than they thought they could do, and that they could be somebody that, they didn't picture themselves being. (P.W.)

Transformative teachers consciously "think in layers of complexity" contributing to each moment unfolding in the classroom (M.K.). They are flexible and adaptable while maintaining structure. C.B. practices "personalization," or the slightly different way the teacher reflexively responds to each student as part of how they navigate classroom dynamics. C.B.'s value for personalization is the foundation for building scaffolds to create access for a struggling student to grasp the lesson at hand. By the teacher being reflexive and responsive, students see that the teacher is willing to meet them.

Seven participants emphasized how important it is to be present and propel the students forward by engaging with their intellectual minds. Participant O.H. emphasized, "don't be lazy—move around the room continuously and work with students until they get it." They continued,

When I get to work, I'm never standing in the front of the class. I'm always running around the classroom. There was one time during my career where I sat down, that's because I was really sick. And the kids are like, "Why are you sitting down? Are you sick?" And, I was really sick.

...

So, you move around the classroom and you make sure, that they are all working. When they need, you have explained it. Then, you collect their work, and use that process of working on things together to build up their grade. They are working; they're working with a partner. You are engaging with them, you are going around the room, you are helping them. (O.H.)

Participant I.S. suggested that teachers learn to be the person who is bringing calmness to the room. Y.E. said teachers need to be able to handle conflict resolution and de-escalation techniques; they must be a restorative mediator. C.G. has found that "the energy and vibes" the teacher is holding in any given moment really do matter. Eight participants stated that they find it is possible to change the classroom energy when the teacher changes their own.

Sometimes you get a really anxious kid, who's really worried about why they don't understand something. And they're really reacting to *why* they don't understand something. Even if they aren't saying that—but they're reacting to that. And being able to approach them with some sort of influence that is going to have a calming influence, that's not going to be potentially exasperating. By being light, "Here, these are all the things you can do," and "these are the things that are okay." . . .

I think that sometimes the anxious kid is that way because they want an A+. I think before a student had kind of pointed that out to me, I was more meeting them in the state of anxiety. And, now, I'm able to be like, pushing the anxiousness out, and showing them, "We don't need to be anxious to get this done." (C.B.)

D.G. talked about the need for teachers to lead a practice of being kind on purpose, reflecting that teachers are not all-knowing, infallible beings, and neither are their students. By teaching kindness on purpose, teachers can cultivate a community of curiosity where everyone is learning together.

Twelve participants found that developing their content and pedagogical expertise created new possibilities in teaching by helping them to see more ways to explore content through real-world context. S.J. and N.F. were among those who found deepening context knowledge also made it possible for them to become more flexible in adapting curriculum and differentiating for multiple access points that draw out each student's unique strengths.

At some point, you will reach the limits of your knowledge as a teacher—either at your pedagogical knowledge, or your content knowledge. So, I went back to school, a lot, and I taught seventh-grade history. It became clear to me that students couldn't read at all. They couldn't read words in the textbook, like mountain and altitude. These were intelligent people. . . .

And so, I went back to school in the summer, I took phonology and linguistics classes because I was never taught how to teach reading. So in other words, even with my best intentions I didn't have the content or skills to teach what they needed. So, I went back to school, I got the content and skills to do it. If you are an English teacher, and you don't know the grammar, or linguistics, see what I am saying? Like, if you haven't studied Black language, if you haven't studied complex sentencing, then, you don't know what's going on to support them....

I see that in math teachers that I coach all the time. A lot of math teachers don't have a depth of math knowledge, so their toolkit for responding to student work is *so* under developed. Then, you watch a teacher like who I just observed, for example, for her evaluation, who knows the math so well, You watch the way she worked with students. She said, "I know exactly why you did that, and you did that because of this, and, here is how you take the next step." And it really matters, the quality of teaching that you have access to providing. I mean, whether you will be that teacher or not, is so much different, depending on content knowledge. . . .

So, what I am trying to say is that, seeing a student, seeing their work properly, is a professional standard. There are things you can do as a professional, that you can do to help. Learn to see their work, to see where they really are at, in order to help them move forward. (M.A.)

Participants gave importance to carefully choosing the content they teach so that, as A.M. said, it can become "deeply relevant and meaningful to students everyday lives." As students are exposed to more of the world, it is essential to change and update the content to what is more useful knowledge, for them.

Participants put emphasis on how important it is that students need their education for their life right now, even more than they will need it for later. L.S. believes that it is the teacher's responsibility to teach students to read when it becomes apparent they cannot. L.S. was sad to reflect that often they see teachers who pretend the student just "isn't trying hard enough" when it is actually a literacy issue. Participants, including P.W., recommended focusing on creating connections to the real world so that students see how their learning is applying to the situation they are living in, right now, regardless of their academic skill level.

The gap between research and practice is real, and A.M. talked about how looking in books or in research for help is not always fruitful. D.N. talked about how teaching is hard, and scary:

I think some of the scariest things about being a young teacher is, you walk in that classroom, and you have this plan. A plan to do this, this, and this today, but inevitably, you would not do that, that, and that. You know? And just, things, what happened? And you would be put in these situations where, you have no idea what to handle, or how to handle it. . . .

I think, a big part of me finally realized that I am the calm, as the teacher. Like, I used to be really uptight, I mean, I'm still so uptight, but, it was just like this sense of, this is what I want to get done today. But like, there are things that come up. Some kid is gonna come in hungry, and then not want to do it. Someone will have a legitimate question that helps me realize no one knows what I am talking about. (D.N.)

E.C, H.L., and G.A. agreed, "sometimes teachers get stuck" (O.H.); they simply don't know what to do and have to go seeking help from their colleagues, collaborators, and mentors. Eight participants shared that their relationships with other educators have been paramount to overcoming challenging teaching situations. Participant O.H. reflected back on their career and said that "without a doubt, teaching never becomes easy and it is always exhausting; this type of work takes resilience, endurance, and commitment to teaching."

F.M. and N.F. pointed out that it is the teacher's job to have appropriate teaching boundaries, which included knowing when to refer students to someone in a more well-suited role—it is not their job to be a therapists. Participants F.M., S.J., and W.F. griped that a large struggle they see across classrooms is that teachers need a more complete understanding of trauma and how to handle the symptoms of PTSD in the classroom. For example, G.A. is concerned that many teachers do not know what to do about the fact that they have a crack-addicted child in their room, someone who is still capable of developing an intellectual identity. C.H. thinks that transformative teachers have the “willingness to see, do, and give what is truly needed,” and they also know when to step away from a situation and take a breath. Participant T.J. observed that when life is tough, sometimes the hugs and the love are the biggest reason kids come to school. Participant M.A. explained that hugging a student is not always an appropriate way to offer support, and participants shared many ways to be there for a student in tough times, while still respecting the teacher–student relationship. Participants, including G.A. and Y.E., are convinced that a huge way to support students is by feeding them food; hungry students feel like the teacher cares when they bring in snacks. F.M. and T.J. agreed that for other students, what they truly need is someone to go to court with them. The bottom line though, is that teachers are available to the individual kid, not just as a student in the class but also as a whole person trying to intellectually understand the world.

Ways to facilitate.

Twelve participants agreed, “teaching is an act of creativity” (R.O.).

According to participants like G.A., transformative teachers are constantly creating ways to engage their students. Their goal is to expose their students to real life, the macrocosm of the global world, within the microcosm of the classroom (R.B. & M.K.). Participants like E.C. are devoted to creating a “visceral connection to learning through giving an intellectual experience,” and then talking about it. Participants emphasized showing students the world through experiential learning (H.L.) and “structured interactions, rituals, rites of passage” (T.J.). Although participants expressed value for many different ways to teach and learn, there is agreement that engaging students through shared, real-world, activities “creates opportunities to relieve the sense of isolation” (F.T.) that young people experience in the world today. K.I. finds that by allowing students to learn about each other’s thinking processes and ideas, they learn about new possibilities they had not yet thought of.

I give [students] space to bring in their own minds. And then we build up a conversation, bring in the content, and relate it back to their own lives. It’s hard, and you probably, definitely don’t cover as much of the content. But, I think if you see yourself as a teacher where the content is the kids—the content is helping them to become the people that they’re going to be, then you are willing to miss out teaching that other novel. Or whatever it is. We won’t get to World War I because, really we need to talk more about the Civil War because I think its more important to spend X time on this. When it is interesting to the kids, then, I think it’s worth it. (A.M.)

I.S., H.L., and V.R. highlighted the importance of creating events as opportunities for growth experiences. Twenty-one participants emphasized their success through using group or project-based curriculums, learning demos, interactive events, and connections through organizations outside of the school. They have

used cooperative (H.L.) and social learning to productively explore ideas in dialogue, process information or experiences through conversation (I.S., M.K., E.C., P.W., K.I., & N.F.). Participants believe that social learning builds social confidence (S.N.) and utilizes peer motivation (F.M., Y.E., & F.T.), ultimately building a stronger classroom learning community.

Participants repeatedly pointed out that learning through dialogue (K.I., G.R., & F.M.) and “processing ideas in conversation” (H.L.) is significant to students’ ability to make meaning and construct mental models of complex concepts. This allows for the discussion of unsolvable problems (S.N.), the possible processes for finding answers (N.F.), and ways for making alternate meaning in consideration of variables that could have been viewed from multiple perspectives (A.M.). To do this, participants ask students open-ended questions, probing thought-provoking questions that highlight looking at the situation in a way the student had not thought of (K.I., D.G., & N.F.). When students say, “I don’t know,” F.M. recommended that teachers “ask, don’t tell.” F.M. has found successful teachers use questions to lead students to seeing a situation from new angles for rethinking their approach. S.J., R.O., N.F., H.L., and R.B. concluded that transformative teachers model how to ask better questions and use better critical reasoning by sharing their thinking out loud and asking students to do the same. Participants, including L.S., G.A., and O.H., talked about the importance of providing structure for deciding which information students already have, which they still need, and how to organize it. Teachers provide students with structure and process to use inquiry cycles (P.W., M.K., & H.L.). R.B. explained students

need teachers to use words, images, and “paint mental pictures” during the processes of finding solutions and answers. N.F. and C.H reflected that interactive dialogue allows for conceptual connections to be made, so that eventually skills can transfer across context and content.

Participants shared stories of transformative teaching as a creative process of setting students up to be the investigator in search of understanding, fostering motivation through cultivating the students’ curiosity and inquiry about the real world. Participant H.L., a veteran teacher, administrator, and instructional coach explained that transformative learning involves the teacher as facilitator coconstructing and negotiating meaning with the student.

Now, we are talking about, the teacher becomes a resource. The teacher becomes a facilitator. You can acquire and inquire and bounce ideas off of the teacher. So, now the relationship, now the student sees the teacher, that group sees the teacher, as a potential resource to maybe bounce ideas off, check theories. . . .

What the teacher does is remain in the facilitator role. The teacher does not necessarily give answers, but pose other questions, and maybe prod them, or move them in a different direction, or propose new questions. The teacher might identify that there might be something wrong with the direction they’re heading in. And, how do you ask questions that surface the problem? Rather than saying, “This is wrong.” . . .

So, the facilitator role changes the relationship. The student always remains the owner of that knowledge, and the teacher is just facilitating the development of the student. And that student is asking questions of the teacher. The student actually is developing a sense of agency, and the teacher becomes that resource. . . .

And now the teacher as facilitator has to think around the possible errors that are occurring, and what are some of the questions they can suggest students begin with to address their errors? And so that doesn’t happen in the traditional way, you turn your paper in, the teacher grades it and they give it back to you, right? [By being a facilitator of learning,] the teacher engages back and forth with the student, seeing the students’ growth through the deepening inquiry process. (H.L.)

V.R. pointed out that exploration through dialogue or play is distinctly different than skill-building: intellectual dialogue can be playful in that it is flexible and

creative, about “learning to figure things out” (H.L.). E.C. explained that academic skills need more structure. Skills-based learning focuses on techniques and processes for problem-solving approaches, executive functioning, or pragmatics like research and writing, and need to be taught through direct instruction (L.S., R.O., M.A., & S.N.). I.S. explained that it is the teacher’s responsibility to specifically coach students on study skills like “chunking,” which is grouping meaningful pieces of information together, or developing a visual representation of the concept; they emphasized that many academic skills need to be taught to mastery to all students.

Participants, including M.A., V.R., and P.W., explained that this is part of the difference in teaching for remediation or teaching for rigor. Remediation fills in skills-based gaps and builds a stronger technical foundation, particularly for the skills that must be taught to mastery. Rigor, often through dialogue and interaction (K.I.), pushes the edge of what can be conceived of (C.G.), and can be taught through the lens of “interpretation” (V.R.). An English teacher explained to me (H.) that even students with low academic literacy skills are able to engage rigorously in developing their own intellectual ideas when provided with the appropriate support.

M.A.: I practice using asset mindset, and I think about which parts the kid did great at. So, in other words, I will read a paper and be like “Wow that kid is so smart,” and other people would read it, and think, “It’s a bunch of trash. What are they even talking about? I can’t even make out what they are talking about.” And, I’m like, “Really? It’s as plain as the nose that’s growing on your face.”

H.: And do you think that’s a skill that people can learn? Or, does that have to come from who they are as a person?

M.A.: Absolutely, it can be learned, and I have taught teachers how to see it. . . .

Say you are looking at [a students' writing] from a remedial or a deficit point of view. And, you're missing the point of what they are saying. I would have you re-read the words. "Look at it, right here" [pointing at an imaginary paper]. . . .

And, you show it to them. Again, and again, and again. And, you read it to them out loud. Until, they can see it from a different angle. . . .

A lot of times, what stops a teacher from being able to see what the student is doing, or saying, or showing, is that they get stuck in the deficit mode. Because, they don't know what to say to move the students' work forward. So in other words, it's a deficit on the part of the teacher, and they blame it on the kids.

Seventeen participants pointed out that there is a difference between knowing a student needs remediation and generally holding a deficit point of view about their students. Participants described how those with low academic skills, for instance from having a visual processing disability, still "need to be challenged" (S.J.) to develop their mind and intellect (P.W.). D.N., T.J., and P.D. explained that "learning to figure things out" (H.L.) makes it possible for students to "back up their thinking with evidence" (S.J.), a skill students will benefit from in all aspects of their life moving forward.

Participants G.A., Y.E., G.A., and R.B. stressed that students need to learn how to do their own research, to be able to rigorously have their reasoning and logic questioned. Students need to get deeply into details with ideas; they need to break down the confusing complexities, to see that the world is not black and white (S.J., R.O., N.F., H.L., & R.B.).

There's a small argument out there about productive struggle, And, what it means is, [the teachers] are pushing students in a way that is accessible to them. Push students so that they have to do something that, it is not necessarily easy, it's not really in their wheelhouse. Like, writing a good essay, or doing a research paper. . . .

Students are relearning how to write, analytically. But, you're able to push them. It's productive in the sense that, it doesn't drive the student away. The student is still there, and struggling to do it, and getting better at it. . . .

And, that's what kids mean, when they say, "Break it down." They mean that you're able to; it doesn't mean you tell them it all, but you break down the big things, and the challenging things; that you're able to give them a way in, versus just confusing them. (O.H.)

Participant A.M. has found that productive struggle is an essential part of meaning-making. Students need to grapple with ideas because, according to M.A., sorting through how ideas fit together is how small bits of meaning become constructed together into concepts. Teachers facilitate students developing understanding by making their own meaningful connections (I.S. & V.R.).

F.T., L.S., and R.B. talked about how today's adolescents are critical consumers; even more so now, they need to develop the critical thinking skills so they do not believe everything they are told. Students need to be taught how to look at the world—or the problems they encounter in the world—critically, by being shown multiple sides of issues and stories.

We need to be gentle with the ninth graders, first of all, you know. I'm not a teacher that tries to, you know, push a particular agenda on students. I like to facilitate them understanding the world in their own way. And, to enable them to have voice, and enable them to share it. . . .

You know, you don't come in my class and all of a sudden you're going to be told what to think. I don't believe in that. But I do believe in giving them alternatives to the mainstream narrative. . . .

And, in 11th and 12th grade they are very aware. They are very aware that the textbook is not accurate. They're very aware that the history books have told many lies, that their culture is not enough represented. So, as a teacher, you have to respond to that. (S.J.)

Participants, like P.W. and M.K., have found that when it comes to content, there is value in teaching depth over breadth. R.B. agreed that this is especially true with super-personally relevant ideas and topics students are

passionate about; it is an opportunity to allow the students' inquiry and curiosity to motivate conceptual deepening. Over and over, participants shared that the most important way to teach is to focus on the student, and how to engage that student's intellectual mind so they become prepared to navigate their life independently.

I think it's so helpful and so important as an educator to make sure you know who you're teaching to. And if you don't know, then you better find out. I don't know everything; there is no way I know about everything my kids' experience. If I don't go find out, or if I don't read up, or I'm not prepared to handle what may come my way with this population, then I'm not giving this job due service. . . .

We are educators, we should be lifelong learners and arm ourselves with whatever we need to make sure that these people, these humans, are well cared for. School, to me, is so much more than just learning academic skills, it's so much more than that. It's teaching you about life. I don't think school has been approached that way historically; I think that's really important for me as an educator to remember. . . .

I'm teaching humans, I'm teaching humans how to navigate a world that is not easy to navigate, and I have to make sure that I'm giving them what they need. That's more than I think the average teacher signs up for. I'm okay with that. I think that's really something important. . . .

Life is hard; it's really hard for them. It's probably harder than I can imagine, for them. If I come here thinking I know what the hell is up, they can feel it, they will know it, they're going to smell it, and they are never going respect me. I cannot honestly ask for respect if I am not going to try and figure out what the hell is up with them in their life. (R.B.)

By bringing meta-awareness to the complexity in human and knowledge systems, teachers are able to provide direction, maps, and models for navigating the elusive and shifting sociopolitical and economic systems, which students live in every day.

Reflexive and responsive.

Transformative teachers are facilitators that are reflective and responsive while co-creatively engaged with learners. Stories told by 28 participants confirmed that teachers who change and transform "to meet the kids' needs"

(F.M.) have a greater willingness to self-reflect paired with the capacity to take the action steps needed for improvement. Participants like M.A. and O.H. have found that reflection through collegiality is essential because teaching can be an isolating profession, sometimes going all day without other adults in the room. G.A. was one of the participants that believe teachers need collegiality in order to grow—not just teachers in the same school, but also teachers with the same content: “I have another teacher here that I can bounce ideas off of, which is great, but it’s not the same as doing it with someone working on the same material. I need someone to balance and ground me when I plan.” When teachers change the way they are doing things, 18 participants agreed that it begins with “reflecting on what worked” (K.I.) and what did not. Then, teachers need collaborators who know the situation, to help them “seek out alternative solutions” (E.C.), and pragmatically enact these solutions (H.L.). H.L. hypothesized that it is easier for newer teachers to change to meet their students’ needs because they are not yet set in their ways.

I think the best teachers that we actually have here, the teacher that is like a fish to water: the new teachers, those that have been teaching three or four years, they are amazing. The one thing that they have in common is that, they are reflective. They think about their practice. . . .

I try to play the role of facilitator, asking questions. And whatever they decide they want to do, I will support them in that. Whatever. You need some training? We’ll pay for you to go to that workshop; then, its up to you to progressively incorporate those things. . . .

You have to do the work yourself. I can explain what you could do, but you need to do it yourself. I can’t be reflective for you. I can’t be the one in your head, actually trying to do the proper learning techniques; but I can make it so it can be not risk-averse, so you can try. And, hey, there’s nothing wrong with trying and failing. . . .

Let’s process this. What didn’t work? And why didn’t you think it worked? Then next time, don’t try this again, but set it up a different way. Think of what didn’t work, we’ll make sure we set up according to the

reasons you think it didn't work. And we'll make sure those reasons don't exist; and see if it happens anymore. . . .

I think willingness to change is kind of different than being reflective. [Willingness to change] is more of an internal thing? That is, your own reflection but without anyone giving you feedback. And then, being able to receive feedback. Those two things will help you grow, because one deals with how you see things. And the other is being able to take outside feedback around what other people are saying; together they make your own reflection. (H.L.)

Individuals from three separate participating school sites, including H.L., talked about how teachers at their schools have led transformations by taking real actions to embody and improve their plans. These leaders consulted with their colleagues through distributed leadership to find a better way to approach planning for and working with students on the day-to-day scale and the bigger vision. They spent time thinking and talking with others about how to change the variables in the learning situation so that a better, more engaging experience can work for more students.

Participants, including C.G., T.J., P.D., and S.N., discussed the importance of teachers changing to meet their students' needs, rather than expecting that students change to meet the teacher. M.A. emphasized that the most successful transformative teachers are "willing to change how they show up as a teacher in the classroom." Participants agreed with D.N., that it is essential to be able to recognize that "when a third of the class is failing, it is the teacher," not the students. It can be "uncomfortable" (T.J.) to be flexible, to realize "I'm not perfect" (B.M.) in the middle of teaching a carefully planned lesson. Participants agreed with N.F., who has found it essential for the teacher to "pause and reflect" and be willing to "modify on the fly," and with A.M., who values the ability of a teacher to "adapt lessons in the moment." T.J. elaborated, saying teachers need to

accept that although it may be uncomfortable, they have to take responsibility for their own handling of any situation in a less than ideal way by owning it, and making reparations. B.M. offered that this can be subtle, simply taking a deep breath, apologizing for a confusing statement, then beginning again to explain in a better way. Participants like W.F., including K.I., C.B., N.F., P.D., and, D.G., believe that teachers benefit when they allow their students and colleagues to give them feedback, take it seriously, and change based on what is being called for. S.J., A.M., and L.S. reflected that it is necessary to recognize that students with different backgrounds and learning needs ultimately push the teacher to learn new ways to communicate productively. P.W. has found that when they can take on connecting with students as an interesting challenge, the result is reduced stress for students and teachers through smoother communications.

Eleven participants commented that they believe it is the educator's ego getting in the way when they give in to thinking the students don't care, or aren't listening, when really it is the teacher needing to adapt. I.S. suggested that those who resist changing or don't even see a reason to change, ultimately need to look inward at their own unexamined worldviews to let go of, what P.D. called, their "defensiveness." Participant C.H. proposed that teachers need tools for dealing with "our culture's shadow" and these negative dynamics as they play out in the classroom.

I just don't feel like I see a change . . . in teachers. I think, there are some teachers who feel like, "I know what I'm doing, I don't need to change." You know? . . .

I think there's, that . . . I think that, willingness is one part, and also awareness. The idea that, like, what you're doing, it's really not working. But you're not aware, that it's not working. . . .

And I think when you start seeing, the kids, when you actually see that they have assets. And when you actually—when you are willing to self reflect on your own practice. That’s when you can start changing. Or you start blaming people. (T.J.)

T.J. also observed, “some teachers get uncomfortable by student empowerment and transformation,” as if they become threatened when students who are expected to fail begin succeeding. Participant M.A. explained, some individuals “can’t see kids past their own unconscious bias” to see where the student is intellectually located. P.W. concluded that factors impacting “psycho-social awareness” are likely unaddressed limiting worldviews resulting from acculturated identity narratives. W.F. and P.D. concluded that there is a dire need for tools and techniques that cultivate healthy ego in classroom, while addressing the unhealthy victim narratives perpetuating internalized oppression.

Classroom Systems—Theme: Context Management

This theme encompasses concrete ways that teachers can work in the classroom to impact the variables constituting the systemic constraints of situations which catalyze transformations and a student’s capacity to become a self-transformer.

Relational container.

The classroom container is the system for how a classroom functions as a shared space that is organized by following specific rules, boundaries, and expectations designed to create access for and engagement with all members. The teachers’ capacity to build a strong relational container relies on both real modeling and relational solidarity. Participants have found that developing a strong learning container makes the classroom “a place where students will want

to come” (R.B.), “a clean space” both physically and emotionally (N.F.), “where students can be themselves” (S.J.). Seven participants talked about school and the classroom being the safest place many of their students are able to go to, and how they believe it is important to recognize that some students come to school just to be where they feel safe. C.H. and C.B. emphasized that energy and vibe, although subtle and immeasurable, are important in developing a solid classroom container. M.A., a long-time teaching veteran, administrator, and coach described how a teacher’s way, style, energy, or vibe can completely dictate whether or not a teacher is successful with a group of students, particularly if that individual is not willing to adjust to meet their students’ needs. There are many qualities that participants pointed out can be helpful to practice and perpetuate when building a strong classroom container. The list of characteristics included humility, empathy, compassion, gentleness, curiosity, sincerity, appreciation, humanness, patience, genuineness, humor, and playfulness. H.L. and other veteran educators emphasized the need to be willing to reflect on and use different attitudes and tones because these qualities can be tools in the classroom, but take time to develop and hone. M.A. talked about how when they first began teaching, they had to learn to make a pleasant face rather than scowl when thinking—even something as simple as smiling on purpose can make a difference to an already anxious student.

I use a lot of humor. Humor is something that people might take for granted, but I think making a joke here and there, having a smile on your face, it’s important. Also, not going really, really, hard when a kid comes in late. And like, you’re saying hello to everyone, building relationships in small moments, during transitions. You see the kid always wearing a metal shirt, say, “Oh, you like so-and-so? I listen to so-and-so.” (P.D.)

The students have a need to feel safe in order to let their guards down so they can take risks in a good way. A sense of “safety is developed by the teacher” (G.R.) through “setting boundaries” (F.M.) around what is “an appropriate way to comport oneself” (W.F.), and “having clear expectations for what students need to do” (I.S.). A.M. explained that students crave some level of predictability in what comes next. Being predictable can be in many forms that don’t need to become boring: it can show up in the ways teachers respond to student feedback (C.G., M.A., & O.H.), their style of handling chaos (C.B.), or the “structure of learning processes” (P.W.). Classrooms need to be somewhere students can be themselves (F.T.), to feel loved and valued as a member of their learning community (Y.E.). The following quote was spoken by a participant, working with an at-risk student population in a small school focused on a whole-person education:

We are really lucky; we have a really beautiful campus. And our custodians take really good care of us. I think that is part of it, knowing that [the students] have a space that’s cared for. They are coming in here and feeling the cleanliness, the calm of this place [gesturing around the room with their hands to indicate feeling into the space]. And, that *we* care about *our* building. They feel that *they* should care about this place, that *they* want it to be nice. . . .

I think it creates a different environment than just this weird institution. My kids can make tea, or they can meet in here [motioning around the classroom], they can put their stuff in here. . . . I want them to feel comfortable here, because, if you’re not comfortable here, then what’s the point? I know that is small stuff, but I know that they don’t really get it at home. Like, everyone comes here and they get a free breakfast. We share snacks. We don’t want you to punch in a code, like we are tracking if you eat. (R.B.)

The classroom is a “microcosm of society where peer dynamics mirror the real world” (N.F.), and real-world experiences can be recreated inside the classroom (P.W.). R.B. explained, “Here, possibilities exist that cannot happen outside the classroom.” Participants M.K., F.T., and P.D. shared their goal to have

classrooms where students can, if only for a few minutes at a time, be someone different than their families think they are, be someone different than their friends think they are. D.G. emphasized that a good classroom container is “a place they can try on new roles.” S.J. and Y.E. think teachers make this possible through providing a space where it is okay to share and try on new ideas. A.M. has found success building the good classroom container through using circles where students can explore questions and deep thoughts that they hadn’t dared to think about, or have the floor to share an idea they had been thinking about. W.F. has spent a great deal of time working with teachers to practice using and enforcing nonviolent communication techniques. E.C. summarized nonviolent communication as putting students “on boost” for what they are awesome at, while not “on blast” for their shortcomings. K.I., who also works with many teachers, has found that by helping everyone in the group recognize their uniqueness, or the sometimes-odd similarities between class members, they build appreciation in new ways and this strengthen bonds across the classroom.

Nineteen participants emphasized that it is essential to build a classroom learning culture where students collaborate, push each other, and get motivated together. One of the final participants was able to sum it up well; although this is a lengthy excerpt, it does highlight several valuable points. As mentioned above, this is one of the participants who had been trained in using Complex Instruction (Cohen & Lotan, 2014) as a foundation of their teaching pedagogy.

[Groupmates] are supposed to read every problem together out loud, and then clarify, and then struggle together. I always come back to it. You work as a group. You stick together. You work as a team. If someone is flying ahead, that’s not good. You’re actually hurting your team and

you're hurting yourself, because then someone else in your group may not be able to answer my checkpoint questions that I give every day. . . .

My stamps are really pretty specific. The first one, every single day, is to get your quick start. The second one is for group work, and it's always something like, stick together, or think out loud. Then, use the middle [of the table] so that everyone can see what's going on. And sometimes it's different, but almost always it's like that. Every day it's group-work, group-work, group-work; working-together, working-together, working-together. You need to explain yourself to each other. You need to argue with each other. You need to do that until you come to an agreement that every, single, one of you, can articulate. . . .

That's how I differentiate for kids who, maybe, have trouble decoding, or are struggling with being on a team. And I have four cards, they take one card, and so one of the suits, like spades, will be picked and those students will have to explain their group's solution to a given problem. I'll be like, "What is it you guys said?" And, they don't know sometimes. Then I'll be like, "Okay, everyone, take 30 seconds to talk to your group. How do you do this?" They can usually say something when I come back. . . .

It's reinforced that you will be working collaboratively, as a group. And that means that everyone is fully prepared to explain it to me. If you're just working by yourself, or, you're working with one other person, or sometimes, when you're not directly sharing ideas, it will end up getting called out. [Students] become very extrinsically motivated to work collaboratively as a group. . . .

At this point of the year, it's gotten to . . . where . . . I've been able to relax a little more. And, they're still doing it. So, I think that, I really push hard on that stuff in the beginning of the year. And then, this time of year, when we're all trained, and it's hard to pay as much attention, to like, every little detail of your lesson structure; fortunately it's like, the culture is there more. And it's easier to work with. I think, in an ideal world, I would work on strong classroom container everyday, but by now, I'm tired. It's something that, I have the energy to really focus everything on, each day, in the beginning. (S.N.)

Practices to build the classroom container can be done together on purpose, and led by the teacher. Thirteen participants discussed the need for teachers to work on instilling structure until it comes naturally.

Participants have found that, for the most part, "good classroom structures remove obstacles to learning" (S.J.). This can be as simple as knowing where to get things and what to do when (N.F. & C.B.). Classroom structures can be

complex, like having graphic organizers or modified versions of worksheets available for the students who will need a different entry point into the assignment or different level of support (M.A.). C.H. believes that creating structure is part of planning good instruction, which A.M., K.I., L.S., and V.R. said is done to support students in need of remediation as well as pushing students to an extra level of challenge. Classroom structure can become behavior management through consistently planning lessons that are varied and multimodal, (N.F., G.A., & S.N.). Participants F.M., I.S., C.H., and M.K. shared that it can be helpful for students to stay engaged and hold onto their focus when they know there will be something different or geared toward their type of skills coming next. N.F. uses structure as the basis for posing questions together, looking at different ways to find answers, or approach a problem in a way no one tried yet. Students become familiar with the process and then are able to engage with content more deeply (P.W.). Participants identified several techniques for putting structure to learning processes: (a) tell students the broken-down plan for class or a long-term project ahead of time, then follow it (G.A.); (b) prepare students for what is coming next by relating it to what they are doing now (D.G. & V.R.); (c) guide students to next steps, or remind them of time and deadlines (B.M. & C.H.); (d) let them know how long they will need to sustain a particular type of focus and attention like group work, note taking, or whole-class conversation (I.S.).

As the data has shown, the classroom container is designed to facilitate learning and growth. To do this, participants, including H.L., E.C., M.A., and S.J., expressed the importance of teaching students to learn how to express their

thoughts and ideas through their own voice, speaking their truth from their own unique position. C.H. emphasized, “Do not silence students’ voices.” Participant T.J. recommended focusing on fostering the students’ development of their own voices by showing them how to hone and tune their voice through the way they express their message in writing. M.A., D.N., and G.A. were among participants who talked about the need for teaching students how to make their words and communication refined, so that their messages could be given and received in a better way. C.H., who runs a popular lunchtime poetry club, believes that making space for each student’s voice shows value for that student’s experience. This has in turn built a tighter-knit learning community where everyone can move forward together while creating deeper learning.

H.L. believes that those who are able to be leaders need to be taught how to take leadership opportunities and use this type of intelligence as a skill and strength. Y.E. considers that leadership is something to be taught in order to deepen and ground group experiences for all members, rather than individuals abusing or neglecting their power. Students do need time to process information, get a thought out, and make a comment to their peers (L.S., D.N., & M.K.), but when students are engaged through the pace and accessibility of the lesson, their conversations subside (A.M.). Participants agree that creating good group dynamics comes down to knowing one’s students.

Participation goes back to personalization, because I do different things for different people. Part of it is making the seating charts, some of it has to do with separating people that are not going to be productive together and distracting. I try to proactively think through if there’s a student who kind of clams up, and putting them with somebody who is better for them to work with. Because some kids that tend to get it more quickly might

just stick to themselves, and not really reach out. Versus, the kids that avoid the work but are social enough to ask for help. So, I make social matches, so they check in with their friends and make sure that they got it. I strategically make seating charts to accommodate that. (C.B.)

Sometimes, participants warned, things will just fall apart, despite the teacher's with-it-ness. So C.B. recommends that when mild chaos arises, "be the bringer of calm." C.G. advocated for staying positive and teaching through the chaos, out to the other side, back into the lesson. F.M. pointed out that it is unfair to a class when the teacher is targeting one student constantly. In consideration of this, I.S. needs to think about their students who have difficulty and plan ahead for what could go wrong. O.H. has seen that "it is often struggling students that will act out in mild chaos." However, P.W. said the same struggling students "will shut up when they are interested." C.G. and M.A. agreed they have found that in order to intellectually move forward, the learning needs to continue—which, E.C. has found, may need to result in a tangent conversation regarding the disruption. Particularly if the disruption cannot be ignored and needs to be addressed, R.O., a teacher of over 20 years, enjoyed using the tangent lesson from the situation as a cleverly disguised segue back into the lesson plans.

The container is built using "common rules and common language" (C.G.), which Y.E. said are essential for being able to develop understanding with each other as a classroom community. L.S. and G.A., both teachers for over 15 years, commented that a communication dynamic will inevitably develop, so begin by using terms everyone can agree on, be aware of the group dynamic, and talk about as a class. Participants S.N. and C.H. believe in full transparency regarding why things are done which way, because clear cause-and-effect can

help students buy into agreements they may otherwise be resistant to. When agreements are broken, boundaries crossed, or expectations not met, N.F. has found that it is helpful to decontextualize errors from a situation that may feel deeply personal so students can see that all humans make common mistakes. O.H. recommends having group conversations about classroom issues, and to address public issues publicly. This helps to hold the group accountable for collective learning (S.N.), while honoring each other through developing understanding with each other (M.K.). Conversely, N.F. and F.M. said it is also important to address individual issues privately because it helps to build trust that students won't be publicly blasted every time they make a mistake. Publicly blasting a kid puts them on the defensive and can lead to communication breakdowns (T.J.). When things do not go well, participants W.F., D.G., and V.T. agreed that it is important to have closure over conflict on purpose—between teacher and student, student and student, or teacher and colleagues.

Participants G.R., F.M., N.F., M.K., and S.N. reflected that in many situations, it can be essential to work out classroom issues without involving administration, because it builds better teacher–student relationships. Seven participants, starting with F.M., used the words “keep the students in the classroom” because regardless of how well the situation is going, it cannot improve if the student is not in the classroom. F.M. also discussed the importance of including students in developing solutions for resolving classroom issues. Y.E. agreed, saying this shows students how to look beyond their own needs and demonstrates that they can look through the perspective of the others involved.

Creating culture.

Boundaries and expectations are like the psychological and social support structures giving shape to, holding up, and creating the classroom culture. The school has built a basic shape and size for rules and expectations, usually to some sort of a traditional standard. The teacher frames out the space to meet the needs of the class goals, asking themselves basic questions like, will the class be set up for group work areas, or individual? (A.M.) Then together, the teacher and the students build more details (W.F.), beginning with making agreements for how to best engage with each other (K.I. & S.N.). Twenty participants emphasized the importance that teachers need to have, show, and maintain their own standards and expectations to demonstrate commitment toward engaging with and developing the students' intellectual minds. Participants, such as B.M., warned that students will push back and try to manipulate the boundaries the teacher has set. F.M., S.J., and C.G. agreed that most students act grouchy when they feel uncomfortable being pushed to grow, but the teacher lowering standards and relaxing boundaries does not help the students in very many situations.

Several participants cautioned: do not try to be friends with students. P.W. told a story about a dear student who had been spending lots of extra time for tutoring and mentoring. The teacher had begun to think of the student as a friend. During lunch, the teacher went to the bathroom, leaving the student in the classroom alone. The teacher returned; the student went to her next class a short while later, nothing weird had grabbed the teacher's attention. The teacher spent the day working, then walked out to their car to drive home. They found that their

dear student had taken the keys while they were in the bathroom and stolen their car.

Participants L.S. and B.M. agreed that trying to get students to like you, or want to work with you, usually backfires. Instead, M.A., S.J., I.S., R.O., and V.R. recommend that teachers create opportunities to build relationships by talking to students about their work, accessing their intellectual mind. L.S. and S.N. explained that transformative teachers draw students in by letting them appeal to the teacher in the way they choose to, instead of only on the teacher's terms. Participants, such as T.J., F.M., S.J. and C.H., talk casually with students about their word choices and actions, or the words and actions they don't take. G.R., H.L., B.M., T.J., and R.B. believe it is important for educators to hold students personally accountable for how they choose to engage or not engage in the classroom or school container. Allowing students to be evasive is enabling them and a failure on the part of the teacher (Y.E., D.G., & M.A.). When the students' choices do not meet the expected standard, C.H. finds that teachers need to call them out and tell them so they become aware of it. C.H. shared that communications about correcting behavior can be used to build rapport through dialogue; playfulness keeps it light while still challenging students to become better at meeting expectations and understanding boundary-setting. R.B. said that students need to know when they have missed their mark: point out the difference between what their intention was and the impact they are having, or the student will not learn to see it.

Fifteen participants agreed they have been able to foster work ethic by holding the core value, “It’s not okay to not try” (K.I.). C.H. talked about learning how to “make them listen to you.” C.B. said a large focus is on setting up the classroom in a way to “force them to do the work” by making learning the best available option. As N.F., D.N., M.K., and E.C. shared, even working on small steps develops engagement in thinking and learning as a continual process. G.R. reflected that the continual progress, even if it is a small step, is what fosters work ethic. Transformative teachers are able to make students listen and get them to do the work, “as a standard” (M.A.). They create work that the student can do, and talk in a way the students can hear (C.H., B.M., & T.J.). H.L. and M.A. both explained that the teacher develops the student by maintaining and moving forward the boundary between what a student can do and what they are learning how to do. Participants told stories that revealed the process of helping a student move forward. O.H., a veteran teacher and coach, was able to articulate this process simply: the teacher sets an expectation, provides an opportunity, or explains some information. The student responds in some way appropriate to the context, then the teacher either affirms their offer or rejects it and the process begins again. S.N. agreed that this reciprocal process continues until the teacher and student come to an agreement. The teacher propels students’ growth by increasingly expecting better from every individual student, regardless of where they began compared to their peers (D.N., C.G., P.W., & N.F.). Reflecting on his many years of teaching, O.H. suggested that teachers monitor the growing edges of ways the student is learning; their thinking boundaries get recreated and

renewed over the course of the year to create a better platform for continuing the work when it gets overwhelming or tiresome, which it will.

Participants D.N., N.F., A.M., and S.N. all pointed out that when a single student is failing, it is not usually about the teacher. I.S. believed that for many students it is simply about not taking personal responsibility, but eventually, all students will have to learn how to take personal responsibility, even though they may not know how yet. L.S. finds others may have a learning disability or serious psycho-social difficulties hampering their success. Participant S.J. said that when the student tries to manipulate a situation to avoid doing work and the teacher buys into it, the student then has gotten out of doing their part. It is not helpful to the student to enable their work avoidance because “kids must take the step to integrate” (O.H) what they have learned into their own way of understanding; the “kids must do their part” (S.N.). D.N explained there are simply some “kids don’t want to be reached,” do not trust the teacher, and will not take the step to consider where an idea or piece of information will fit into their existing worldview and way of making meaning. Participants, such as C.G. and G.A., have seen that there have been students who were paying more attention than they ever let on, in some cases it would be apparent through well-done work, but in others it did not become apparent for years.

Participants A.M. and S.J. emphasized that it is doing the students a disservice to give into students when they appeal for reduced expectation and boundaries. C.G., on the other hand, thinks bending the rules is not the same as breaking them; there is a need for flexibility, to recognize that some situations are

exceptional. Eleven participants discussed that they believe students are more successful with clear roles in relationship, structure for how the process will unfold, organization of information in a way they can access, and consequences to hold them accountable. Students respond well when they know where they stand and why (R.O. & V.R.). Transformative teachers will push back when students push on the boundaries: they “have a spine and stand up to the students” (B.M.), they tell students what needs to improve and why. D.N. and Y.E. stand out to their students by being different using new ways to define boundaries. M.A. suggested having higher expectations to encourage thoughtfulness. R.B. said that teachers must “be explicit and open about where students stand” and what they need to do, without judgment. If a student does not truly comprehend the situation they are looking at, participants such as L.S. stressed the importance of making time to communicate with the student in a way that helps them receive the new information.

Positive directionality.

Transformative teachers tell their students positive, self-efficacious affirmations: “You are the sun, you are so lit, you are so bright” (T.J.). Twenty-one participants believe that teachers show value for each student’s unique intellectual mind through highlighting how and in what ways they are smart. R.O., V.R., and S.N. agreed: they “focus on what can grow rather than on what’s broken” (C.G.). Participants D.N. and M.K. focus on the intellectual aspects of how a student thinks, talks, and communicates. Teachers do this because the process of identifying one’s own unique intelligences is not an easy task for most

students. Nine participants find that the outside perspective of the teacher is needed to clue the student into parts of themselves they maybe didn't even see, or were ignoring on purpose, that often become strengths over time.

Fifteen participants agreed that it is the teacher's job to find out what students are smart at. Teachers need to see each student for what they are smart at, and then redefine what smartness means, to help student see how their smartness translates into them truly having an intellectual mind. K.I. explained that it is by redefining smartness and celebrating the positive intellectual aspects of who each student is that they can begin to see a new way to approach the world because they see themselves differently. T.J., D.G., and E.U. shared that a student's idea of what is possible for them in the world changes through developing new aspects of identity around their new perspective of what makes them smart. P.W. explained that changing how a student engages with learning inside the classroom changes how they engage with learning in the world outside of the classroom.

Participants found that working on not only students' academic skills but also developing their intellect, increased their students "mental agility" (V.R.). Participants, including K.I., and C.G., M.A., talked about the importance of sharing student work with the class as a way to highlight the varieties for approaching, and thinking about assignments. N.F. explained that this helps students to regularly see multiple new ways for thinking about approaching problem-solving, and that their own way may not be the only way. H.L. shared that identifying and pointing out good behavior beyond submission and compliance to social rules and standards provides opportunities for students to

rethink the variables that constitute what behaving well looks like, and why behaving well is valuable. T.J., B.M., and V.R. concluded that acknowledging the often-debated difference between street smarts and book smarts creates a doorway through which students who do not think of themselves as academically intelligent can feel invited to the intellectual conversation. D.G. uses the street-smart type of intelligence that many students identify with to frame conversations that utilize complex critical thinking processes like holding multiple perspectives, intellectual logic and reasoning, or pro-social communication. Participants, including M.K., R.B., P.D., P.W., and V.R., said that students need to see problem-solving situations in real-world context in order to integrate their classroom learning as useful to the rest of their lives, for right now.

N.F. and C.B. recommended developing systems for keeping track of student successes that show value for their efforts, and demonstrate that the teacher sees the student's work as valid and meaningful. K.I. explained that explicitly celebrating certain students' growth or ideas publicly can provide balance to interpersonal power dynamics, which may have developed based on academic rank. F.M. has found that students who believe they will not be successful need help negotiating stronger classroom relationships so that they are willing to take the risks that come with engaging in learning. B.M. reflected that engaging in learning often feels vulnerable because students may have to admit their initial thinking was flawed, so it is the teacher's job to reframe this into a strength rather than a shame.

Twenty participants talked in depth about how one well done and publicly commended assignment or thinking process can shift an entire room's perspective of a student. This matters because, as O.H. said, "students are more willing to work when they already feel successful." Nine participants talked about how many already feel unsuccessful, and that to these students, not trying at all is preferable over trying but still feeling like they are failing, the whole way through. I.S. suggested creating entry points into lessons that begin from a place of ability: a skill the student can definitely do or an idea they already know completely. R.O. said that teachers ask questions to make space for the learner to think about ways to do the work, while sometimes mitigating the panic from having no idea how to approach the situation. A.M. has found that having multiple access points to a lesson shows respect for where the student is at, as a learner, rather than shaming them for not learning at the same rate as their peers.

Participants S.J., V.R., A.M., R.B., and F.T. have found that students need to hear out loud, see, and experience that others who they respect are proud of them for the work they have put in. Six participants emphasized that students need positive reinforcement, even if their progress is a small success that pales in comparison to the big picture of what they need to do. I.S. concluded that without acknowledgment, many students wouldn't know they were finding a better path. Participants R.O., H.L., S.J., and F.T. have experienced that using affirmations and encouragement are the foundation of what most students need in order to build confidence. R.O. and V.R. agreed that transformative teachers are cheerleaders that believe in the kids and see their potential. Participant C.H. has

found it valuable to maintain a classroom standard of being willing to understand a student's best intentions behind their perhaps poorly made choices, then requiring the student to try again until they have been able to re-engineer their intention appropriately.

Participants T.J. and V.R. pointed out that discomfort from vulnerability in the classroom is not just about being afraid of looking stupid—students are afraid of being vulnerable because they face real risks when they voice their true perspectives. Another student's retaliation for difference of opinion really could follow them home, out of the classroom, and into the streets. Not truly understanding or respecting the line between a student's discomfort with learning and with what they would rather be private about creates unsafe spaces where students will refuse to put themselves out there. Conversely, G.A. has found that deepening classroom relationships creates a place where it is okay to doubt and question, and can overcome and break down a student's long-held misperceptions about a peer, and help students see each other in new light.

Spiraling process.

Twenty participants, such as V.R., emphasized that “learning is a thinking–doing process.” E.C. and G.A. find that the most-easy-to-integrate learning is experiential, it is “hands on.” H.L. sees that learning is something humans do naturally from day one. O.H. and T.J. believe that learning is the constant process of growing. Participants such as S.J. pointed out that whether or not the students are willing to admit it, they are “doing it all the time” when it comes to topics and situations they are interested in. Sixteen participants have

found that by explicitly talking about the wide variety of learning processes and the different ways to think about thinking, teachers are able to bring their students' awareness to all of the ways that they are already intellectually engaging with their world. Participants K.I., N.F., D.N., D.G., C.B., and S.N. all agreed that participatory learning processes are important structures for learning to build intellectual engagement, such as the Complex Instruction (Cohen & Lotan, 2014) techniques which they all have been trained in. Participants M.K., R.B., P.W., E.C., and V.R. have seen that when their students become comfortable with a particular learning process, the content can be varied and rigorous because the students have tools they know they can rely on, and structure to fall back on when they are lost. The 11 participants that use almost exclusively real-world, contextualized, process-based project learning have found that it draws the connections between the academic learning and the types of learning they will need to be active participants in for their life outside of compulsory education.

Participants P.W., E.C., G.A., C.B., M.K., and S.N. accentuated that students benefit from explicitly being taught how to go through learning processes as an iterative cycle. M.A. compared the experience of grappling to make sense from challenging new information to the not-knowing feeling of being in the middle of a writing process or inquiry cycle. I.S. has found following a shared process outline helps students dissolve confusion into clarity through continuing to follow up to make sure they have completed each step. E.C. suggested it is essential that the learning experience is a result of completing each of the given steps of the process. Participants, including V.R., believe that struggling students

give up on the inquiry process when they don't see how the questioning process will turn into the learning experience itself. E.C. and R.B. offered that pretty much any hands-on, real world experiences can become effective project-based learning by applying explicit academic standards and uniform core tenets. As a project-based teacher for over a decade, P.W. has found that effective projects are integrated, thematic, interdisciplinary, and develop the students' systems thinking. M.K. reflected that students will inevitably get sick of a subject; to avoid this, the focus of the project needs to be on the doing instead of on the knowing. H.L. and P.W. agree that with a focus on concrete, tangible steps to take if it becomes challenging, students are able to stay intellectually engaged with the learning process.

Through "metaconversations about processes and structures" (I.S.), participants recommend that teachers give language to talk about thinking and strategies for negotiating meaning (N.F. & R.B.). Transformative teachers communicate their own thoughts out loud as they go through the inquiry process, modeling different possible ways to sort through ideas about a situation (F.M., S.J., B.M., & S.N.). By discussing approaches to problem-solving and explaining their own interpretations, and asking their students to do the same, K.I. said that teachers are breaking down how ideas can be put together in a variety of ways. This also makes it possible for the students to share a different way of thinking that the teacher had possibly not thought of (N.F.). By acknowledging the possibility that a student has knowledge the teacher may not have, O.H.

explained, there is also a rebalancing of power in the room so that all individuals are knowledge owners, not just the teacher.

What I try and do is, I try to be like, “Listen, push back until you agree, right?” I try to give them the sense of like, “Not necessarily push back until you understand, but push back until you agree.” I guess, the different terminology gives them the sense that like, “My opinion matters too. I’m not just trying to interpret what someone else is saying,” right?...

Like, for instance yesterday this girl and her friend came up and was getting tutoring from me. I was showing them why formulas form shapes. Every time I would stop and I would state, “Do you believe me?” And they’re like, “yeah” or “no.” . . .

And I tried to tell them like, “Don’t just trust people, don’t just trust me because I said something is true. This is 2017 in America; we can’t be trusting anybody. Don’t just tell me something is the answer, because your teacher told you it was the answer. . . . I want you to be able to explain, in your own interpretation of why that makes sense.” Right? Like, I don’t actually know. Another thing that’s common in my classroom is like, people will be like, “Is this right?” And I’ll be like, “I don’t know, is it? You know this because?” (S.N.)

Participants believe that thinking and learning processes need to be made transparent, demystified so that students can see what is going on inside their own mind, along with the teachers, and their peers’ minds too. F.T. recommended that teachers and students develop common language for communicating thoughts. O.H. said that “kids need to write out their ideas to reflect on and develop their ideas, they need to write on real topics” that are connected to their own lives. V.R. and M.K. agreed that making thinking explicit gives students opportunities to play with different ideas, work out ways ideas can be put together, decide what they really think, and to question if they mean exactly what they said.

Learning feedback loops.

As a result of technology, schools are no longer one of the few places an individual can access knowledge. F.T. mused that today’s students have been technology-native since they were born, and subsequently are much more “critical

consumers” than previous generations. Since students can really see what is out in the world through social media and the Internet, I.S. believes this generation wants better options for learning, they want to learn how to think better, not to learn more information they could otherwise look up online. As participant K.I. explained, “Students need to learn how to think about thinking, rather than being taught what and how to think.” Seventeen participants focus on the purpose of assignments as being for students to develop intellectual skills and thinking abilities while simultaneously gaining insight into what needs support to move forward. Participants C.J and O.H. agreed: do not waste the students’ time, or your own time on busywork or poorly thought-out assignments. D.G. and Y.E. find success through giving meaningful assignments as tools for engaging with each other, and providing feedback to the student on their learning process. O.H. has found that the reciprocal exchange between teacher and student builds rapport and intellectual depth.

D.N. emphasized the importance of reviewing work and returning it as soon as possible. F.M. and N.F. recommended providing meaningful feedback on work to shows concrete value for the assignment and intellectual development.

In terms of assignments, I think it’s super-important to be grading and giving feedback consistently. I think we underestimate the power of it. . . . Not grading in terms of putting an A or B or C on the paper, but like, *really* having this constant exchange with students. And for students, to see their work handed back by the teacher in a way that has been didactic and meaningful, right? So it’s not just me, like, giving you piece of paper and being like, A or B. But, it’s like, treating their work as an artifact. Like, this is a meaningful piece of treasure, for my students. So I get into that habit to return work every day, the very next class period. It’s not an essay, I’m not writing an essay on each kids paper. But, I am telling them something that they did really well, and I’m telling them a way that they can improve, right? I’ve gotten into the habit of not even putting a grade

on it, you know, it's just kind of like, here is your feedback. I read this, . . . I want you to fix this. Then, they want to know their grade, and I'll say, "You can have your grade when you fix that." (N.F.)

The more quickly students receive useful feedback on completed work, the more often they are able to see and learn from their errors, integrate new understanding accurately, and confidently apply newly developed skills or ideas to an idea they are still making sense from.

Like assignments, P.W. said, students need to see a shift in the purpose of assessments. Participants believe that assessments are for highlighting what students know (K.I. & S.N.). I.S. uses assessments for finding out how student put together new ideas and integrate concepts into existing skills. Smaller assessments are aimed at seeing what students need support in learning about the content, while larger assessments are opportunities for application of intellect.

On major assessment, I give a grade. But it's like, "I want to know where you are, this is where you're at." And, we do test corrections, so, I guess, they really correct everything. I take test corrections into consideration. But I, at this point in my career, I won't give an assessment until I know kids are ready. So, their averages are A- or B+ on assessments. I'm not giving assessments prematurely. I want them to do well. They have to know the stuff, and want to show me what they know. Or, they are going to shut down, full of angst and anxiety. I'll be like, "Oops, I made a mistake, I should've waited a day to give that." (N.F.)

Participants repeatedly highlighted that assessments are not consequences, they are "opportunities to show what you know" (K.I.). O.H. posited that the importance of approaching assignments for intellectual mastery, rather than work completion, is emphasized when students fail assessments.

R.O. supposed that assessments intended to demonstrate mastery over a particular communication format or rote memory of information are needed to support developing a particular skill or integrating foundational content.

However, participants like P.W. and S.N. have found that the information only really integrates into the student's whole thinking when the content is more relevant to the context.

When there is some rule or something that is kind of arbitrary in math and the kids notice it is arbitrary and ask me why it's true . . . I say I don't know, but this is the thing, and this is the convention, and if you write it this way it's going to be right, but that way it'll be wrong. And so I just sort of point those out because they don't make as much sense, and are harder to remember. (S.N.)

L.S. has found that articulating the purpose of learning seemingly useless information, such as conventions, can be a simple way to release resistance for students. Participants have found that flexibility in what constitutes completing an assignment or assessment is needed. For example, if a student is coming in after school to work with the teacher for one-to-one help on a subject, O.H. counts that as doing the work. If a student completes a lab with the teacher's support, demonstrating thoughtful understanding to all required points but is unable to adequately translate their thoughts into writing, P.W. argued that grading consideration needs to be on more than the student's written lab sheet.

Participants like R.B., a learning specialist, believe that the fact a student engaged with and completed the work must be part of the grade even if they did not fully understand the higher-level concepts, or could not get their responses written down eloquently. D.G. pointed out that giving a zero for painstakingly done but incorrect work with no opportunity to revise, does not engage the student's intellectual mind. Particularly for seriously struggling students, 11 participants advocated for some form of variable credits on the grounds that it can be essential for students learning to see the value in attempting work they already believe they

will fail. Participant P.W. explained that giving these students half of their credit hours for a 50% instead of zero credit because it is an F, is motivating and validating the effort the student was able to put in. Participants, such as L.S., A.M., and G.A., find a way to give credit for all of the work that students do, regardless of the format of their work.

C.B. talked about the need for creating classroom organizational systems that make tracking assignments less of an obstacle to getting credit for student work.

One thing I think is helpful is always collecting stuff. Like, whatever we do in class, I am collecting it at the end of the period. And, *do not* let them take it home; because, then, they don't have a chance to lose it, or risk getting a zero. . . .

It is better for their grade if I just collect it. It's a pet peeve of mine. I started collecting it at the door as they leave, so it's a little more like, an exit ticket at the end of class. . . .

I do participation points for passing things out or volunteering information, but I don't put it directly in their grade often. It's more like, at the end the marking period I'll bump them up, or down, based on bonus points. . . .

Ideally, I give them graded work back as quickly as possible. At the end of each content unit, I do make a packet of work to show what they turned in looks like. And then that way, they can kind of see what they're missing or if they need to revise anything for more points. I let them revise stuff till the grading period is over. (C.B.)

S.J. agreed that using classroom organization systems for student work makes it easier to give grades and feedback consistently. Participants F.T, T.J., E.C., and L.S. suggested that the association of grades with intellectual engagement and growth needs to begin at a younger age because equating grades with intellectual growth, rather than assignment completion, is an idea students struggle with. In particular, G.R., T.J., and O.H. pointed out that the social promotion happening in elementary and middle school is doing a disservice to

students because once they reach high school, they have trouble grasping that their course credits and ability to matriculate are tied to their grades.

School-Wide Systems—Theme: Context Management

The classroom is a nested system within a school, which is nested within the greater social, political, and economic climate of the ever-changing world. It is the challenge of teachers and school employees, agreed participants N.F. and R.B., to translate the macro vision of the world to a micro experiential simulation of the real world context that students are learning to better navigate through formalized education. Participants, including S.J., P.W., and T.J., reflected that in an inherently oppressive education system, the key to successful transformation is to liberate students as activists, teaching them how to disrupt the power structures through leveraging communications in an empowered way to reframe limiting narratives. Participants found that supporting students in developing empowered narratives increases an individual's mobility (E.C. & L.S.) and agility within the context of social and economic systems (M.A., N.F., & O.H.) via creating access to experiences of, and opportunities for, success (K.I. & H.L.). This theme encompasses systems and issues at the school level that mediate between the students' experiences and the outside world that teachers are preparing them to navigate. They learn to navigate school and community expectations, standards, social norms, bureaucracy, and power dynamics, which mirror the larger world context within which the school is situated.

Systemic attunement toward solidarity.

Participants like T.J. believe that “teachers are the missing link in overcoming systemic oppression.” Like S.J., I.S., and F.M., they philosophically operate through the lens that equity is at the foundation of education theory and pedagogy. M.A., P.W., O.H., and R.B. explained that it is not helpful for teachers to be frenzied activists because that often means losing the intellectual mind of a student to the victim narrative of that student’s situation. S.J. pointed out that this may also cause students to suffer from a teacher’s tendency of self-abandonment: when the teacher is not keeping good self-care, they end up sacrificing themselves or their students because they become caught up in the need for social justice. Participant S.N. candidly shared a frustration with the “social justice warrior trap.” When teachers fall into this trap, they can fail to embody and live the changes needed to resist oppression in relationship with their students.

Participants N.F., D.N., O.H., and C.B. defined resisting oppression in relationship with students as something that is happening constantly in transformative teaching. L.S. pointed out that the first step in resisting oppression through teaching includes providing a quality education to each individual regardless of that student’s starting point. A.M. and other participants offered that this indeed can be done through good planning, self-awareness, and kindness. C.H., M.A., P.D., and G.A. argued that if an individual is not willing or able to do this then they do not belong in the classroom and are not a good teacher.

Participants, including L.S. and P.W., have found that “young people need to know the full truth of their oppression and illiteracy in order to become

empowered for overcoming it” (C.H.). S.J. credited student empowerment to developing awareness of what their actual situation is in life. D.N. confirmed that students must become familiar with their own positionality. Participant K.I. emphasized that students need to be explicitly taught how to move through the social dynamics of the world. F.M. and T.J. offered that for many kids, their teachers are the only ones there helping them learn how to navigate the challenging and unfair situations they will come up against on their journey. L.S. said, “students are critical consumers; they want to know what their options are for navigating their life” and they come to school hoping this is what they will learn. K.I., B.M., and V.R. agreed that students who don’t see any options for their lives are the ones who give up first. C.G. pointed out, the “well-behaved students do not need good teachers” because those students are easy to teach. Eleven participants strongly posited that the teachers who are considered good teachers—but who are not really teaching to the more psycho-socially challenging students who have suffered systemic oppression and intergenerational trauma—are perpetuating social injustice, even if it is by omission. Participants P.W., H.L., N.F., and O.H. shared that they think transformative teachers are those who are actively engaged in finding new and better ways to reach even their most challenging students in a way that the whole class community could continue to grow and develop.

I love challenges, and so for me it’s like, how—we have a theme this semester around resistance, resilience, and revolution. I thought, okay, like, what is science or math content that I think will be meaningful for the students? And then, also meaningful for the theme? So, the science we’re doing right now is, we are taking over the garden. Our first questions are like, what makes plants resilient? What do they need to be resilient? What

do they need to be resistant? Too—and how can we revolutionize gardening to cultivate those things? . . .

This is used as a metaphor, and as soon as we're done planting, we have more time to take a step back out, think about this as a metaphor for our own communities and how can we understand in our communities. What we need to be resilient? What makes us resilient? What do we need to be resistant as a community? How can we think about revolutionizing our own communities? . . .

So like, this week we're going camping to work on community building. I'm trying to use this as an opportunity to bridge this idea of learning resilience and resistance through farming. The two big questions are: . . .

First, how does a ranch cultivate resistance and resilience? And, how farming influences revolution? Just thinking about Benjamin Franklin, or Cesar Chavez, or Friere. It's like cultivating revolution. Farming, for me, influences...the way I think about my classroom as a garden, and what each of the plants need and how I can grow without making a mess. . . .

The second big question I want to talk about is, how has revolutionary figures that grew up farming. Like, how does that influence their politics, and how they viewed revolutions? I also think just like farming, revolution starts from the ground up. Thinking about cultivating revolution is really what draws me to here. . . .

Yes, we get to have those conversations and think about designing curriculum around those big questions. I did teach photosynthesis, solar respiration, and the nitrogen cycle—but now it matters for a reason. Then, in math, we're doing mathematical modeling. How can we model oppressive forces that we need to be resistant and resilient to? (M.K.)

G.A., A.M., T.J., and L.S. agreed, planning good instruction that is differentiated and takes into consideration the unique intellectual and social location of each student is caring, is social justice, and it is good teaching. M.A. emphasized that if a teacher doesn't teach to the Black students, or they don't teach to the Latinx students, or they don't teach to all of the students in the room regardless of which -isms they may fall under, then that individual is not actually a good teacher.

According to O.H.'s account, if a teacher is unable to engage their students, or when most students are not able to understand, it means the teacher needs to stop and develop a new approach. Teachers must see their own

unconscious biases and become conscious of their own positionality through self-reflection (H.L.); not being able to do this can become an obstacle in developing relationships and connecting with students (K.I. & N.F.). Participants that are coaches and veteran teachers explained the same idea that a newer teacher shared: “The individual who the teacher is to their students, is not just who they think they are. They do not simply come across as how they want others to see them” (B.M.). Participant M.A. said, “A teacher’s real positionality in the classroom can only be seen through the students’ eyes.” Their positionality is situated within how their students perceive them, and the way students understand where the teacher is coming from, as “a result of their experiences and interactions together” (A.M.).

C.H. and O.H. argued that in consideration of the immense privilege some groups get over others, affirmative action is okay because it is equitable, although it is not equal. Similarly, participants such as F.M. and G.R. thought that although tracking gets misused, it can be effective remediation for social injustice. F.T. talked about tracking students to ensure newcomers to the U.S. can be with their affinity groups so it is easier for them to get along while they do not speak English well. O.H. and M.A. pointed out that tracking can be used to ensure that students from traditionally oppressed populations are offered access to higher intellectual classes despite their need for increased academic skills support.

More than half of the participants consider themselves activists in one way or another, for example, through teaching university courses or being leaders for social justice outside of their teaching requirements. When participants were

asked what issues they thought needed to be explored more deeply, in terms of blocks to teachers' ability to lead transformative change on a school-wide level, several issues and psychological complexes as deserving deeper exploration were identified: (a) the nonbeliever complex (C.G.), (b) the power feminism complex (W.F. & I.S.), (c) the celebrity delusions complex (R.B.), (d) the poverty complex (S.J. & M.A.), (e) the White trash complex (S.J.), (f) the house slave–field slave complex (T.J.), (g) Latinx as the new labor class (E.C.), (h) the new Jim Crow and the industrial prison complex (R.O.), (i) the Asians as the model minority complex (F.T.), and (j) White fragility, White guilt (S.J., M.A., & V.R.). These psycho-social complexes were identified in the data through reflecting on and examining patterns of racism and other -isms described by participants while sharing stories and experiences.

The above complexes were identified after the initial data analysis seemed completed, at which point it became clear an aspect of social justice considerations had not been given full due in terms of relationships within systemic oppression. While reflecting on and examining patterns of racism and other -isms described in participant stories and experiences, these complexes became evident as parts of the chain of colorism, a term that was not explicitly identified in the data but can be used to organize some of these ideas into a systems framework. In their own way, each of these complexes is a psychological internalization of oppressive socio-political dynamics resultant from structurally violent systems of oppression. Interviews with at least half of the participants touched on one or more of these complexes.

A psychological complex is a largely unconscious portion of the blueprint for an individual's worldview, which is generally socially constructed and adopted by an individual, or whole communities. The nonbeliever complex is an adaptation from the idea of being a spiritual atheist, however, it was raised in the research when participants discussed students who simply believe they do not need to do anything toward their future success, expressed through refusing to complete any work at all, a sort of educational apathy. This was identified as apparent in students who have learning disabilities, education trauma, live in abject poverty, or are somehow lost in the system, as well as students who come from caring, loving, hardworking, stable families. It appears that the student just doesn't see the point; they don't feel value for participating in learning, or sometimes even trying at all. Participants said that they see this often in conjunction with adopting some of the next five complexes.

Participant S.J., a White female, articulated the poverty complex in terms of students who believe they are inherently shut out from economic prosperity, perpetuated by the belief that an economic underclass is required for a functioning society, and thus students do not see a value in academic-based education. Conversely, M.A. sternly asserted that although poverty is a significant issue, poverty is ultimately a result of inherently racist sociopolitical economic structures. S.J. also highlighted that race was the underlying issue to poverty, but half jokingly explained that "the White trash complex" is part of why some White teachers—specifically those who grew up poor—believe they could not possibly be harboring unaddressed implicit racist complexes. Individuals afflicted with the

White trash complex believe that their own experience of poverty is justifiably equate-able to systemic oppression through racialized structural violence.

The idea of White fragility was raised by a number of participants, in terms of teachers learning about and needing to address their own internalized racism, and how White and Asian teachers not acknowledging their own racist biases considerably impact their ability to build intellectual relationships with their Black and Brown students. W.F., a White female teacher, described significant conflict between herself and students on multiple occasions, who did not see any virtue in her attempts to facilitate experiences she had hoped would become empowering for the students. This participant, as a result, encountered her White fragility both as a limit to her teaching practice and in her ability to build collegiality with educators of color who had agreed with the students' position. S.N. offered that perhaps it is White guilt that pushes so many White teachers to become what he called social justice warriors or to believe they are in some way saving their students (also commonly called the White savior complex).

Toxic feminism is when White women are adept at using patriarchal power dynamics merely for self-amelioration and furthering their own agenda of stoking their own egos under the guise of empowered feminism. Participant S.J. identified that this is apparent in White female teachers, who seek to gain control within the colonialist patriarchal agenda through extremist feminism, and do not ultimately support the deconstruction of systemic oppression through the actions they take as teachers. One participant characterized this as a significant issue they have with the bonds that White female teachers make with their Black male

students. M.A. described that these women perpetuate a victim mentality by romanticizing the Black male struggle, so the student develops an approval-seeking, emotional dependency on the White female teacher as a hero and a savior, rather than the student becoming empowered in their own rite.

The Latinx community as the new labor class is a result of Spanish-speaking immigrants needing to take labor roles that often do not require mastery of the English language. Thus participants, including L.S., P.D., E.C., and V.R., have seen that Latinx students often develop a complex, enforced by the hierarchy of racialized colorism, in which there is no reason to engage in academics because they believe they are fated to a labor-based career, sometimes expressing that non-labor-related work is undesirable. E.C. hypothesized that these are interlocking dynamics that may contribute to race tensions between Black and Latinx students: the Latinx students believe they are above Black students, who are perceived as lazy. In response, Black students lash out about immigration status or language skills, which can really be preventing Latinx students from upward mobility. Both of these two groups are impacted by what R.O. called the new Jim Crow laws, which is a component of the industrial prison complex. These massive sociopolitical complexes can be more deeply understood by reviewing Chapter 1: Introduction of this document. These complexes were identified in negatively impacting students' mindsets, as they must adopt an entire set of limiting self-views and worldviews in order to integrate psychological acceptance of these socially oppressive, structurally violent intrapsychic systems.

Participant F.T. offered the Asians as model minority complex as a final piece to the scale of racialized colorism—and the underlying caste system in the US. The participant highlighted issues surrounding the challenges Asian-American students have had in their classrooms, and raised the point that these students face unique challenges in comparison to other non-White groups. In this complex, Asian professional success is used to validate the alleged meritocracy, which is championed as the foundation of the American Dream. The participant recalled that this complex originated through government propaganda intended to deflect attention from the racist oppression at the heart of U.S. history and to downplay the resulting struggles of other minorities. However, this complex not only shows up in how Asian students are treated by non-Asian teachers and students, but also as a hierarchy that put Chinese students at the top due to their success in the community, while students from small Pacific Islands are stereotypically deemed less capable.

In addition to tension between wholly separate racialized identity groups, participants also recognized conflict within groups. For instance, a Black participant explained that the house slave—field slave complex demonstrates how racialized colorism plays out in social dynamics, explaining that teachers and administrators often take on the role of what they called “the house slave.”

I think, unfortunately, a lot of our Black [educators] have developed slave mentalities. . . . So, obviously, I teach my students about the house slave and the field slave. The difference between the house Negro, or the field Negro: so the house slave may grow up really nice, have a lot of liberties the field slave doesn't get, maybe even does the master's bidding to keep the field slaves in line. The house slave doesn't want to separate too far from the master; they want to protect their position because they are closer to freedom—the master being the way the school system is set up. . . . The

field Negro, like myself, is like, “We are leaving,” or, “We are not doing this,” or, “We are changing how this is can happen, because we are getting screwed.” And the house slave is like, “Why? What’s wrong with you? Slavery isn’t so bad, just do what they say.” (T.J.)

This participant emphasized how there are Black teachers or administrators working on the behalf of perpetuating White supremacy because they are so comfortable with their positionality within the social systems order that they are no longer teaching on behalf of a transformative, liberatory, emancipatory education. Conversely, those with the field slave mentality meet racialized structural violence through educational systemic oppression with creativity in resistance—sometimes provoking further alienation.

Perhaps then, from this lens, the scale of racialized colorism can be seen, and how it is upheld through complex power dynamics of pitting race groups against each other, both from within and without, to create the systemic tensions that maintain structural violence. This racialized colorism creates another layer of power dynamics and tension in the classroom that transformative teachers practice being cognizant of. Participants found the awareness of these underlying dynamics are particularly important when working with students who have been psychologically traumatized by these pervasive issues in the past.

Social systems reconstruction.

“There are some facts of reality that are more or less unchangeable” (S.J.), which many students need explicitly spelled out for them: Everyone works, unless they have a billionaire for a daddy (G.R.). A person can’t go to work and not do their job (R.B.). According to participants, many students simply do not

understand how human social systems operate (M.A. & D.G.), or that the varied types of rank and status are inseparable from power dynamics (K.I., & S.N.), which are used to perpetuate oppressive systems (C.H., C.G., & R.O.). S.J. reflected that “subtle changes in how students are able to see the underlying structural dynamics of human social systems can have a big impact” on how an individual moves through those systems. N.F. found that in order to be successful through education, students must see a way to use education to learn how to navigate real-world systems, whether they are economic, cultural, or something else. Y.E. elaborated, saying that if they don’t see and feel their education as improving their experiences of or access to these living systems, “students won’t see their education as a valuable tool.” E.C. reflected that when students come to believe education will not improve their situation, their education is no longer able to lead them to social mobility.

When teaching, at least 18 participants talked about practicing developing new social dynamics in their classroom, on purpose, by initiating the process of learning to see the way the unique human social system in each of their classes work. A majority of participants utilize Complex Instruction (Cohen & Lotan, 2014) to disrupt status in the classroom on purpose. These individuals set out from early in the year to create new roles in the classroom community, their own included, aiming to define smartness, power, and the purpose of education in a decidedly different way than what was previously established in their students’ minds. K.I. and S.N. emphasized the importance of teachers keeping an eye on how social hierarchies develop and are maintained in their classes. G.R., F.M.,

R.O., and H.L. point out subtleties that disrupt the status quo. Y.E. has found that it is essential to provide tools for deconstructing power dynamics in the students' everyday lives and conversations. N.F., C.H., and other participants reiterated how important it is that the teacher does not allow violent communication tactics to fly by without being called out in their classroom. T.J. enforces a rule that when a student would use the N* word or other racially charged slurs, the student must do 10 push-ups.

C.J., S.J., R.O., and M.K. all engage on purpose in practices such as eliminating White Eurocentric dominant education structures and content from their teaching in order to “make room for voices that help decolonize education” (K.I.) and rebalance the power of who defines the truth (B.M., & D.G.). Disrupting the existing power structures on purpose is used by N.F., F.T., and S.N. to eliminate in-group out-group status around who is a learner, a grower, an overcomer, and who is not. This ranges from content and curriculum to redefining what it means to be smart (K.I.), or letting go of psycho-social rank on behalf of the teacher as knowledge owner (H.L.).

Teachers can explicitly use the classroom as a microcosm of school-wide and real-world systems dynamics, which, according to K.I., V.R., and D.G., provides an opportunity to show students how to change power structures on purpose. Nearly every single participant discussed, in some way, the importance of tracking power structures, disrupting status, and creating new social norms.

We learn about discrimination, and social justice issues, happening all over the world. We explore questions together, like, What is power? How does one gain power? What is oppression? How do we unlearn oppression? How do we fight oppression? How do we facilitate an

institutional change? And like, what is an institution? Why do we need to change it? How can we foster a systematic transformation on purpose? We look at youth activists and ask, How do these students gather enough information to foster change at their school site? Or in their community? How do they make a change that will be lasting? What kind of conversations were they having? What conversations do we already have that are interrupting the system? Learning to question and explore, that's what the students need. (Y.E.)

G.R., P.W., and M.A., among other participants, have personally experienced that school-wide structures can be used to foster shifts in creativity, innovation, and engagement among teachers, students, and staff.

Participant P.W. shared specific long-term situations where they helped to introduce project-based processes through faculty collaboration. H.L. did this through developing school-wide experiential activities. T.J. and C.H. created buy-in to school-wide common language for speaking out against oppression through slam poetry. V.R., P.W., E.C., R.B., and M.K. all worked in community partnerships to design student opportunities for collaboration, internships, and vocational training with real-world organizations. These types of real-world techniques foster changing ideas around who is the owner of knowledge (K.I.), or “who has the right to have a voice” (F.T.). T.J. explained that alternative opportunities often wake students up to new ideas of what is possible. O.H. summed up what many participants lamented: “The big changes all teachers want to witness one day, to see in their students, happens in the very detailed day-to-day work; the small changes build up to big changes over time.” M.K. and S.N. emphasized that the foundations for creating change must be laid down through structure and boundaries during the “highly adaptable beginning of the school year” (S.N.). Participants, including N.F. and P.D., pointed out that it is always

harder to disrupt social, power, and learning dynamics, or interactive dynamics, that have already been accepted. K.I. explained that as a teacher holding the power in the room, it is easier to mold and shape often-unseen interactive dynamics as they are unfolding. Participant C.H. does this by intervening in both subtle and overt social cues to redirect communications in ways that deconstruct rank and status amongst learners. A.M. even plans lessons around the ways power dynamics between particular students could potentially interrupt the flow of a learning process. R.B. and B.M. find they must be able to simultaneously focus on preventing some students from disengaging or shutting down, while managing others who would take over at the exclusion of others. V.R. and 22 other participants recommended tactics like articulating, breaking down, and naming negative social hierarchies to disrupt and disempower them.

The participant data showed that creating new definitions for success and power, and removing barriers to achieving that, is an iterative process that must be overcome in the small moments over the course of the year or even years.

D.G., A.M., and several other participants talked about how as teachers become more familiar with their students, they can use more subtle cues to support and direct the students in navigating often-challenging systems dynamics.

Participants, including N.F., T.J., and R.O., emphasized that the student comes to experience empowerment in new ways through the teacher's pushing. Teachers can push students to grow through decontextualizing social behavior (C.H.), redefining the meaning of power and status (K.I. & S.N.). M.A. strongly believed in holding students to an intellectual standard that emphasizes doing one's own

very best work possible. N.F. explained that liberation comes from being an activist in freeing oneself from socially imposed oppressive powers.

Mediating systemic pressures.

Administration is the mediating system between the school as a community and the school as a government agency. Participant G.R., a teacher for over a decade with SFUSD, said that a challenge for school staff and administration is navigating the politics and finances of running the school as a business, while simultaneously maintaining responsibility for supporting teachers in becoming better at their jobs. M.A., O.H., and others described the school culture as ultimately being set by the school administration, although teachers can work to uphold or undermine that culture. In H.L.'s years as a teacher and administrator, they found school culture is a reflexive process: "administration must respect teachers in order to demonstrate respect for the students." G.R., I.S., D.G., and P.W. agreed that when teachers are supported and valued by administration and the community, it shows support and value for students and their learning. A veteran participant explained that good administration is not about telling everyone what to do and how to do it. G.R., T.J., and V.R. agreed that good administration provides real professional development training that produces autonomy and "agency in teachers to speak their truth" (H.L.). Teachers and administrators lead learning communities by becoming lifelong learners (M.A.) and modeling value for reflective self-development (O.H.).

You'll find here, at the school site, that positionality is not a big deal. Unless, we're talking about enforcement of something. Like, I am an administrator, but, when I walk into a meeting with my seventh-grade team, I am just another member of the seventh-grade team. My position,

as an administrator, doesn't really come into play. Rank should not be part of it. And, my teachers are buying into that. The only time we have to do something is like, if there's a violation of contract, or if you are late, or abusive. I'm the administrator; I have to say something. . . .

According to the way that we are trying to build relationships and community though, we are all professionals in the building. And, we can hold conversations in terms of our professional learning community. What's good, what's not good for our children? Based on research, and what we're experiencing. So, we are making a community model as colleagues. . . . Creating an experience for people to see why this is better, by making a model through my actions—instead of trying to tell them to do it. . . .

I value collaboration, my teachers need that time; that's why I taught a couple classes at a time, together today in the gym. My teachers really needed that time. I didn't know how to free them all up at once, so that means pulling in people from student support. It showed the teachers I valued them having voice. Distributed leadership. It's not necessarily about the administrator giving up power, it's about how to produce agency within teachers to speak their truth around development. (H.L.)

Administrators nominated as transformative teachers agreed that adults and children learn the same way: all learners need to be provided with experiences to catalyze change. Veteran teachers, such as G.R., R.O., L.S., and G.A, described changes that happened as a whole community, from difficult classes or departments to school-wide transformation. The same advice was offered again and again, like C.G. warned, “no plan, no communication, no change.” O.H., the most veteran teacher, reflected that teachers and administrators must push for clear improvements to policies. In P.W. and M.A.'s experiences, they needed to actually drive the change. When asked “Is something generally across-the-board preventing this type of pedagogy from being taught?” M.A. responded:

Leadership, there has to be site leadership, more so you don't have to, prevent it to have a negative effect. Just doing nothing has a negative effect. In other words, you are challenging the status quo. . . .

And so, the leadership has to be clear, and has to really care, has to really want to do it, to really fight for the vision. . . .

Also, the idea about community, working in community with other teachers, but, that's essential, you know? . . .

And that the work that I have done, the way that I have been able to do the work, is with people leading me, and supporting me, and fighting me, and challenging me. . . .

And I just want to say, about the community of teachers: We have a professionalism and a commitment to the kids, together. So, my first training was with a community of teachers that had high expectations of each other—high standards and wanting everyone to do better. So, it was. You know what I mean? (M.A.)

Y.E. thinks that the teachers needed to “stir the pot to make change” at their school sites and in their classrooms. O.H. believes that change “is an ongoing struggle,” which C.B. said “takes vigilance” on the part of each individual. Change-makers must “push” (E.C.) to maintain “community accountability” (T.J.) toward achieving goals.

O.H., D.G., and V.R. reported that teachers need to have and develop useful tools for student-centered dialogues in committees on the administrative level. Thirteen teachers highlighted that they have benefited from the help of skilled coaches, or reflected on the impact of their teaching mentors. Sixteen participants emphasized the importance and value of collegiality. P.W. believes that teachers “need strong leaders” among their colleagues, leaders who can catalyze their own transformations as teachers.

I had joined a teaching committee at my school. We met once a month, or something. We talked about what’s going on, and ways that we could try to influence positive change amongst the whole staff, and at faculty meetings, stuff like that. It was a lot, I feel. I just learned; I didn’t really say much the first couple years because there were people with so much experience, and so much insight. . . .

Just hearing them talk about it, the way they would talk about their own practice, in their own reflective processes about what they were doing. Then, I would later try to apply that in my work, or in faculty meetings. . . . I think being part of the teaching committee was a big part of my growth because the people there were like, so knowledgeable, and thoughtful. . . . And like, to just get a window into, the like, what is a healthy thought process around a kid that is struggling? Now, I’m going to think through how to approach it, with their model. . . .

I listened to a lot of conversations where it was . . . they just kind of opened up their brain. I was able to see what was going on in their inner process and how they reflected on their experiences to be better. I think that learning how they made their reflective practices helped me. (C.B.)

Participants identified that “collaborative” (K.I.), “reflective dialogue in a collegial academic community of adults” (O.H.) who are focused on improving teaching and school-wide systems (F.M.) is what has made it possible to “push each other’s growth” (O.H.) and hold each other accountable to the action steps agreed upon to make change (L.S.).

C.G. and M.A. described how a bad relationship between administration and teachers will reflect throughout the school culture more strongly than good leadership. H.L., N.F., D.G., and R.B. believe that when teachers feel empowered to use their own voices, they are more able to participate in a collegial community of intellectuals. O.H. explained that with this collegiality, the academic community becomes reflected to the students through an intellectual culture.

Participants, including S.J., W.F., B.M., and L.S., talked about their own struggles of managing the demands of showing up both in teacher preparation and in human emotional wellness. H.L., D.G., R.B., and G.A. discussed encountering difficulty finding enough time in their day to plan, to take care of themselves physically, to contribute to the school community, or to provide extra tutoring to students that need it. Nearly every participant emphasized in some way that teachers need more time than is allotted in their day to collaborate and create the shifts that need to happen across their schools.

I think that a huge obstacle is the amount of just, sheer, how tired you feel. That boils down a lot of the things. Because, in America—in my own little bit of research, that I’ve done about how things are done in other

countries—the sheer volume, the sheer amount of work that is put on upon the teacher, and everything that we ask teachers to do, is enormous. . . .

I feel like, that amount of work is emotionally and physically draining. Think of how hard that can be for teachers, even if they have the best of intentions. Culturally we have this philosophy, and this belief system of an ideal teaching situation, but that doesn't always come into play every single day. (A.M.)

In order to develop improved solutions, participants such as G.R., P.W., and C.B. believe that schools need distributed leadership, a term several participants specifically used. S.J. and A.M. said schools need transparent power dynamics where individuals respect each other as equals and collaborators. Participants like H.L. recognized how in teaching, organizational rank is required for specific reasons, but found that the values of distributed leadership improve pretty much everything else. O.H.'s perspectives showed how individuals with high intellectual or pedagogical rank in regards to teaching skill and practice are able to transcend traditional power dynamics by leading through “reflective collegiality.”

Several participants, including F.M., S.J., and R.O., wanted to emphasize the value they have for their teaching union. R.O. explained that because public education is an institutionalized system, which inevitably exploits students and teachers, there is a real need for strong unions and tenure to protect good teachers who truly stand up to protect students.

You know, it's like, it's all about the kids, man. We have too many folks downtown and even in administration. All they think about is a title, a BMW, and how much they gonna get paid—instead of thinking about these babies. . . .

Our super[intendent] making over \$300,000 a year. Okay. . . .

But, you have kids that we are letting go, and they are going to create the new under-class [slams table] . . .

So I am just, I am really uh, I'm really disgusted with how this has all turned out, and, how the kids are getting played—it's not right. . . .

And if, you are a teacher that really believes in not playing these kids, then you have a target on your back. . . .

But I'll tell you something, for all the hell I gone through, been doing this, I would do it again. . . .

It's the right thing to do, and I care, and I love my kids. They are the saving grace, they really are, and if things were different I could teach for years, but the way it is now I can't teach like this. . . .

These children are worth more than any resource we have, they are the most valuable resource we have, they are priceless, you cannot put a price on our babies, man . . . and I wish that, the society and government, and the district offices, and whatnot, would realize that if they truly invest in our kids . . . stop stealing money from the downtown office and putting it in your pocket and, without doing corrupt unholy things that exploit these children . . . and exploit us, you know, they exploit us too, but I will put the kids first but you know they exploit us. . . .

So the thing is that, you know, I just hope that one day these kids will be in power to do the right things, because they would have seen what was done wrong, they know what not to do, I think, and they know what should be done and that's what I'm hoping happens with these kids . . . this is a very special generation, is a very unique generation and it's the brightest generation in my 60 years I've ever seen. . . . I was not even 1/8 as smart of these kids in seventh grade, and, I wasn't exactly a dummy, so these guys are bright, and, I just have nothing but high hopes. . . .

Actually, I'm convinced, they will change things here and change things for the better, I am convinced of it. (R.O.)

In acknowledging that unions sometimes protect lazy or bad teachers, these participants proposed that schools invest more into fostering collegiality and professional development so that these individuals would engage more fully in their teaching practice. It was pointed out that SFUSD has difficulty keeping good teachers, and suggested that poor benefits or salary were to blame more than anything.

CHAPTER 5: THEORETICAL MODEL

Through the literature review it was clear that the Schlitz et al.'s (2011) WVEP fulfills portions of the definition of transformative teaching provided by Slavich and Zimbardo (2012). Slavich and Zimbardo specifically consider teaching approaches that involve “enhancing students’ learning-related attitudes, values, beliefs and skills” (p. 596) to be acts of transformative teaching that are “designed to change the student academically, socially and spiritually” (p. 577). It was found that transformational experiences do not result in students downloading information from the teacher, but rather change something about how students live and learn by facilitating integration through contextualizing the new information into pre-existing schemas or frames of reference (Slavich, 2005). The literature review identified that transformative teachers help students see education as an integral part of a larger view for their lives, providing a compelling vision for the future. Changing frame of reference to a newly examined worldview enables students to envision new ways of thinking and experiencing life, which creates a reframing of what is possible through education.

What was still needed at the conclusion of the literature review was to understand what the process or structure of a system for transformative teaching might actually look like. How do classroom teachers facilitate the transformative process in their adolescent students on an everyday basis? What does the exchange between the teacher and student(s) look like, sound like, or feel like? What does the teacher do to nurture motivation to authentically engage in

learning? How does the teacher model critical self-reflection? These questions have been addressed in some ways through Chapter 4: Research Findings.

In developing socially constructed grounded theory, Charmaz (2014) emphasized staying close to the data to highlight the “participants’ liminal world of meaning and action” (p. 241). Using the data presented as supporting evidence, a deeper pedagogical systems schematic for transformative teaching in adolescent education is proposed in this chapter. It is certainly true that fostering transformation across worldviews of students throughout the whole nation, as called for by the Council on Foreign Relations (Klein et al., 2012), seems like a daunting task. However, it may be possible to leverage what is currently known about the way information moves through social systems to create a widespread shift in approach to teaching and learning—toward fostering socially, ecologically, and economically conscious transformative mindsets.

Overview of Transforming Psyche Systems Theory (TPST)

The objective of this theory is to close the gap between pedagogical theory and practice as related to transformative teaching by describing what successful transformative teaching looks like in pragmatic action. TPST offers a working conceptual image of the rhythmic interconnectedness within transformative teaching and defines nested systems dynamics impacting worldview transformations. Through the development of a systems schematic, TPST describes the main focuses of transformative teachers and identifies the strategies and processes they find effective in fostering worldview transformation.

The TPST systems schematic is represented by five visual models, developed from the categories and themes of Chapter 4: Research Findings. The findings offered detailed descriptions of what these five systems look like in terms of transformative teaching, each aspect is next briefly outlined to support defining the TPST. The key terms for each the themes and categories are italicized.

Transformative teachers use *relationship systems* to develop *relational solidarity* as the foundation for fostering transformation. Student centered relational solidarity is possible because the teacher is *motivated* to create real experiences, to show up and be present with their students by a unique type of love that happens in learning communities; participant T.J. emphasized that this “love is the dopest drug out.” Transformative teachers practice *behaviors* that develop intellectual rapport—such as flexibility, resiliency, respect, and reliability—while making agreements and negotiating better language by exercising active listening and nonviolent communication techniques to continuously managing power dynamics in learning situations. Transformative teachers engage in constant dialogue and reciprocity to access students’ *perceptions* and worldviews by examining problem solving approaches for navigating intellectual, psychosocial, and political systems dynamics; the students’ unique worldviews become entry points for rigor by using differentiation and nuanced scaffolding to coconstruct more complex intellectual perceptions. The transformative teachers *stance* is standing in solidarity, fighting for the students’ right to develop their intellectual mind by offering earlier interventions, rewriting stories for what is possible, and providing maps for

navigating a way out of their distinct positionality. Transformative teachers address student cognitive distortions involved in *valuation* of learning and education as solely for the purpose of professional and financial gain by facilitating experiences in which students become personally, intellectually, or emotionally invested in reconciling conflicting values, which catalyzes increasing consciousness of the complexity contributing to the students own value system.

Transformative teachers utilize complex *real-world systems* interconnectivity to engage with students through *attunement and entrainment*, as individuals and as a learning community. *Forced entrainment* through *oppression*, such as *racism*, are forms of structural violence that transformative teachers diligently confront and deconstruct in every day conversations, both personally and systematically. Transformative teachers focus on *attuning to the learners positionality* by working to engage with students, despite shutdown, trauma, learned helplessness, or apathy; predicting what will happen because they learned students' triggers and what makes them tick. Teachers are not unnerved by the tough stuff that inevitably will get in the way regardless of students' best intentions for learning. Transformative teachers participate with students in *cocreative social reconstruction* by investigating and identifying meaning making patterns to develop improved responses to situations in which limitations in learning related worldviews had previously been obstacles. Through these newly reconstructed social narratives, transformative teachers develop student *empowerment through voice* by redefining situational contexts to imagine new possibilities and previously unseen opportunities.

Within the *teaching systems*, the transformative teacher is in the role of a *facilitative real model*. Transformative teachers are constantly *modeling* ways to interact and engage with each unfolding moment on multidimensional levels, in concrete and abstract ways using tangible and mental models that break down concepts into manageable pieces. Transformative teachers support students in learning how to organize their own thinking when they *facilitate* problem-solving approaches by modeling inquiry-based concept development for making sense out of situations and building ideas onto each other, relevant to both in and out of the classroom container. The transformative teacher will shift into different *roles* for short periods, or take on multiple roles at the same time, always with the objective of facilitating students taking ownership over their education and lives. The *way* transformative teachers facilitate learning is through holding tension between providing support by contextualizing and scaffolding ideas in processes of structured inquiry versus students independently grappling to make sense and meaning using strategies in their existing skillset. Transformative teachers are *reflexive and responsive* as a result of being reflective and collaborative; they allow students and colleagues to give them feedback, take it seriously, and change based on what is being called for.

Transformative teachers focus on *context management* by engaging with *classroom systems* to establish variables for creating situations and experiences that reasonably could become transformative moments. The *relational container* is given structure by the classrooms systems of agreements about shared learning space, which are organized by specific constraints, dynamics, and processes

designed to create access for and engagement with all members. Transformative teachers manage psychosocial dynamics to *create* a flexible *culture* where students are intellectually engaged coparticipants as the foundation for boundaries and expectations. Transformative teachers focus on *positive directionality* by reframing student narratives and self-talk to develop growth oriented mindsets through intellectual rapport. Transformative teachers emphasize learning as *spiraling processes*; they draw attention to processes by providing language for talking about thinking, and strategies for negotiating meaning in complex situations. Transformative teachers approach assignments and assessments as expositions of *learning feedback loops* through which concrete processes facilitate intellectual integration of abstract concepts.

Schools supportive to transformative teachers focus on *context management* by engaging with *school-wide systems*. Transformative teachers foster *systemic attunement toward solidarity* by philosophically operating with equity as the catalyst for resistance and transformation, offering students truth to combat the illiteracy and oppressions inherent in their social positionality. Transformative teachers manage contexts for school learning culture as a reflexive process of engaging in continuous *social systems reconstruction* to identify, deconstruct, and reconstruct underlying power dynamics and social structures of interpersonal community. Transformative teachers need support from administration in *mediating systemic pressures* between the school as an intellectual community and the school as a government agency.

The operating concept that emerged from this research is the idea of the transformative teacher acting as a facilitative real model in an interconnected panarchy. Transformative teachers are self-reflective real models using multi-dimensional systemic rhythmanalysis to negotiate variables, make agreements, and navigate situations. They facilitate learning dynamics for cocreatively engaged reconstruction of meaning while managing complex contexts and maintaining relational solidarity across settings.

TPST proposes that transformative teachers reflexively and responsively engage interconnective rhythmic entrainment and detrainment, fostering attunement to liberated and emancipated growth mindsets. They cocreatively develop intellectual rapport in the face of resistance, with the objective of making the schematic structure and organization of the worldview a transparent mental model, as scaffolding to build critical self-reflection. Transformative teachers perceive through rhythmanalysis the complex intersectional systemic positionality of their students, and are able to offer real models for working around limitations to shift perception of what is possible from that location.

TPST proposes that transformative teachers think in layers of complexity across the five nested interconnected systems described by Chapter 4: Research Findings, in order to foster worldview transformation through increasing social consciousness in alignment the Schlitz et al. (2010) nonlinear model. TPST supports and builds upon the Schlitz et al. nonlinear model of worldview transformation and developing social consciousness, discussed in detail in Chapter 2: Literature Review. Across the interviews, participants described and

conceptualized transformation as something that could not be considered certainly predictable, manipulatable, or forcible. The Schlitz et al. (2010) model accounts for broad variability in intersectional positionality essential for conceptualization of the nested systems vision of what effective transformative teaching may actually look like in practice.

TPST Visual Models

Chapter 4: Research Findings is organized to reflect the systems schematic presented below. The six nested systems are broken down into their own conceptual images, each of which is an essential component for understanding what transformative teaching looks like. TPST proposes that the majority of thoughts, words, and actions demonstrated by transformative teachers are efforts to cultivate self-transformative, growth oriented mindsets by decreasing cognitive dissonance while increasing worldview flexibility and social consciousness. TPST proposes that transformative teaching is best understood as happening within the context of interconnected panarchical systems that represent the layers of complexity on which effective transformative teachers are engaged.

TPST proposes that transformative teaching, as situated within the systems schematic, happens through the interconnection of relationship, real-world, teaching, classroom, and school-wide systems, which are facilitated and managed through engaged cocreative real modeling. TPST proposes that transformative teachers facilitate entrainment of meaning rhythms across interconnected systems to attunement and sync with liberated and growth oriented mindsets using self-reflection, reflexivity, and responsivity to foster emancipatory moments.

As seen in figure 1, transformative teachers understand that the foundation of their work is relational solidarity with their students. Constantly attuning and re-attuning with their students through relationship, transformative teachers are able to perceive the rhythms and structures of meaning making their students have entrained to that limit their worldview. Transformative teachers offer symbolic anchors and scaffolds to work around blocks to increasing consciousness of positionality in situational context. Context management, across the classroom and school-wide scales, embeds constraints on the potential rhythmicity of the learning dynamics shaping opportunities to facilitate transformation. This schematic of transformative teaching is broken down into five nested systems.

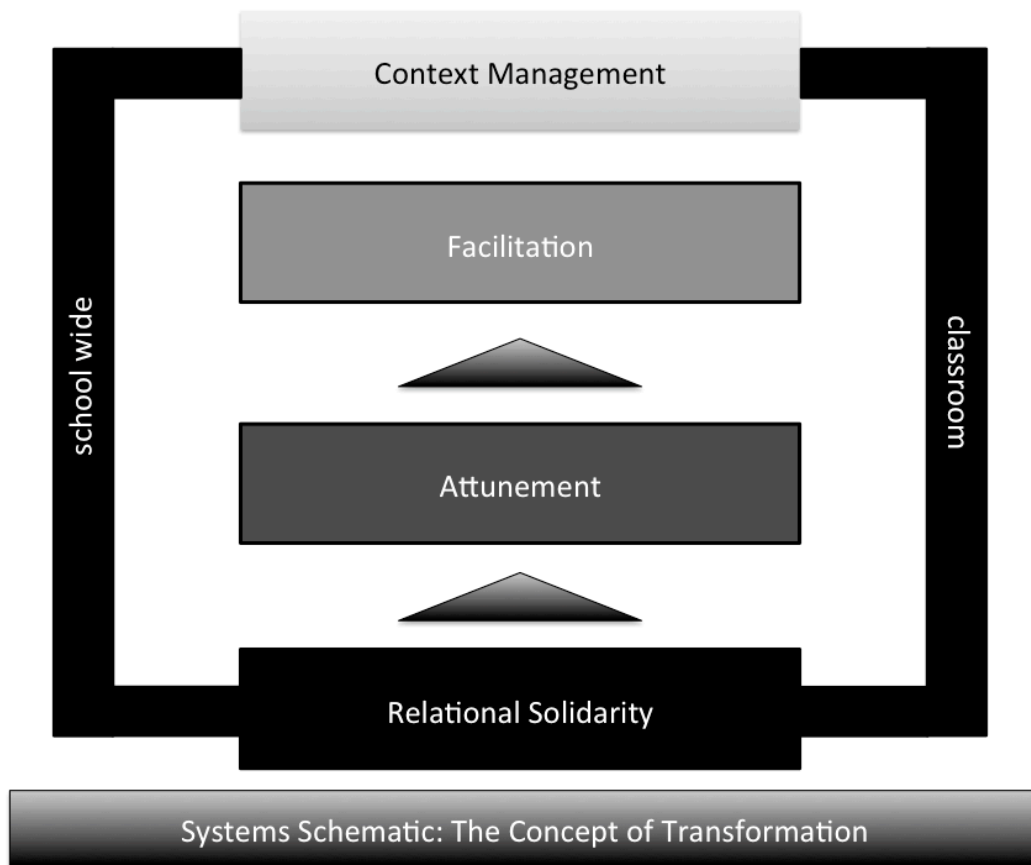
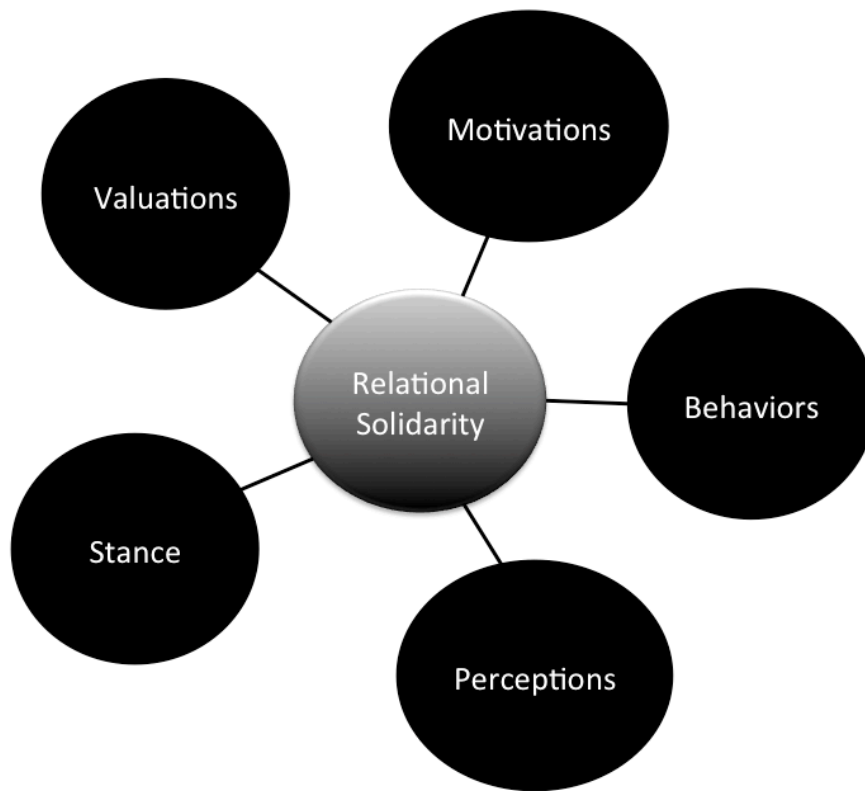


Figure 1. Systems Schematic: The Concept of Transformation. Author’s figure.

Relationship systems- model: relational solidarity.

Relational Solidarity is the foundation of transformative teaching; the systems at play in relational solidarity are outlined in figure 2. This model demonstrates what it is that participants know about engaging students in the transformative process: relational solidarity is the foundation of how they do anything.



Relationship Systems– Theme: Relational Solidarity

Figure 2. Relationship Systems- Theme: Relational Solidarity. Author’s figure.

The five nested relational systems are each an essential and equally weighted component of building relational solidarity. Relational solidarity fundamentally begins with having a love for the kids as the guiding motivation of

the teachers' thoughts, words, and actions. Transformative teachers focus on behaviors that foster respect and trust to build intellectual rapport. Transformative teachers approach from the stance of being in their kids' corner, in solidarity with their students. They engage the students' intellectual mind to develop perception for truly knowing their kids, learning to see through the students' own eyes. Transformative teachers further relational solidarity by maintaining high valuation for empowered, liberated, emancipated growth mindsets. Continuous re-attunement of the meaning making rhythms of the psyche begin with relational solidarity and result in intellectual rapport that becomes leverage to propel worldview transformative processes forward.

Real-world systems- model: attunement and entrainment.

Eventually though, reality always proves itself, and the inevitable challenges interrupt progress. The four major concepts represented by figure 3 are constituted by five categories describing how the impact of the real world seeps into the classroom and school systems no matter how well the teachers and administration work to keep it out. Constraints imposed by and the inevitable influences of real world systems leave imprints on the psychic meaning making systems composing an individuals' worldview, through rhythmic entrainment to real world influences. The real-world systems model is ordered to represent layers of removing obstacles to transformative teaching, beginning with recognition of oppressive systemic entrainment, which must be accounted for to increase social consciousness in alignment the Schlitz et al. (2010) nonlinear model. As discussed in Chapter 1: Introduction, oppressive systems dynamics take place

across social, economic, and political domains by structurally targeting non-dominant populations through forcing entrainment to the dominant groups paradigm, regardless of the resultant damage caused to non-dominant systems.

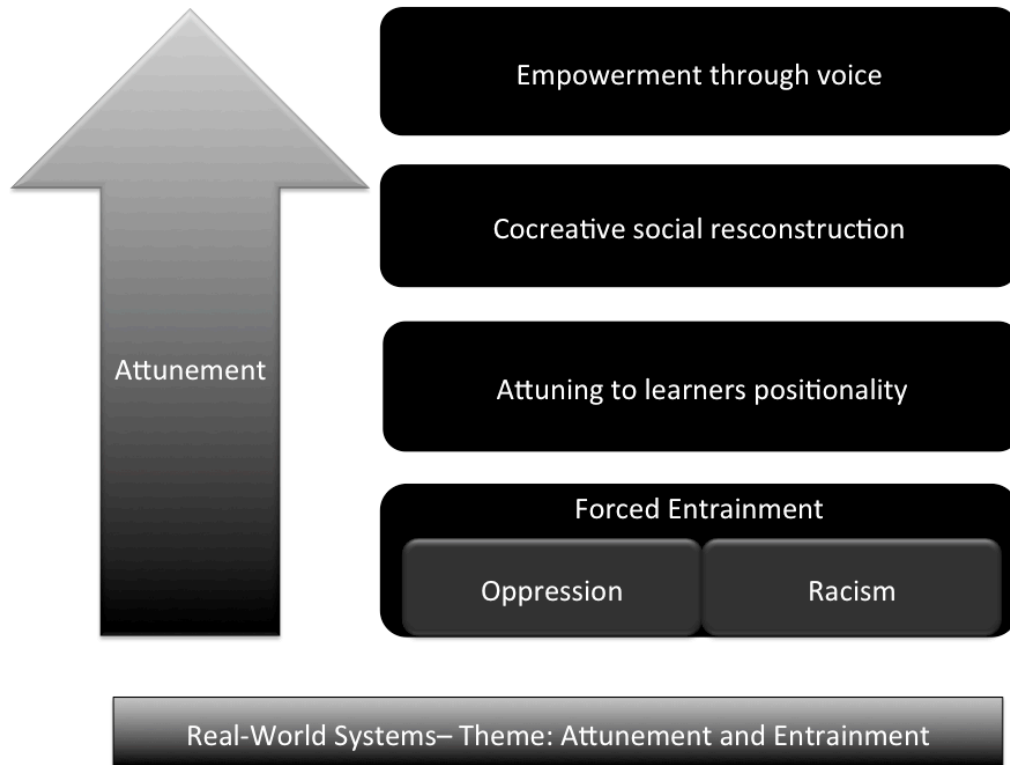


Figure 3. Real-World Systems- Theme: Attunement and Entrainment. Author’s figure

Transformative teachers recognize meaning making patterns that are imprints of systemic oppression, such as racism. Transformative teachers attune to their students limiting learning related worldviews in order to genuinely comprehend, entrain to, and empathize with students’ rhythms and patterns for making meaning. From here, transformative teachers and students are able to cocreatively make new meaning for socially reconstructed perspectives that highlight access to an improved positionality. Together they agree to new context

and symbolic anchors that facilitate a different way, new rhythms of engaging with past and future experiences. Opportunities for increasing intellectual rapport and social consciousness become more possible by developing empowered voices for naming and describing experiences of worldview limitations, especially those resulting from systemically oppressive forces.

Teaching systems- model: Facilitative real model.

Figure 4 is about teachers as real models; they are the facilitator of the transformative process who constantly model ways to interact and engage with

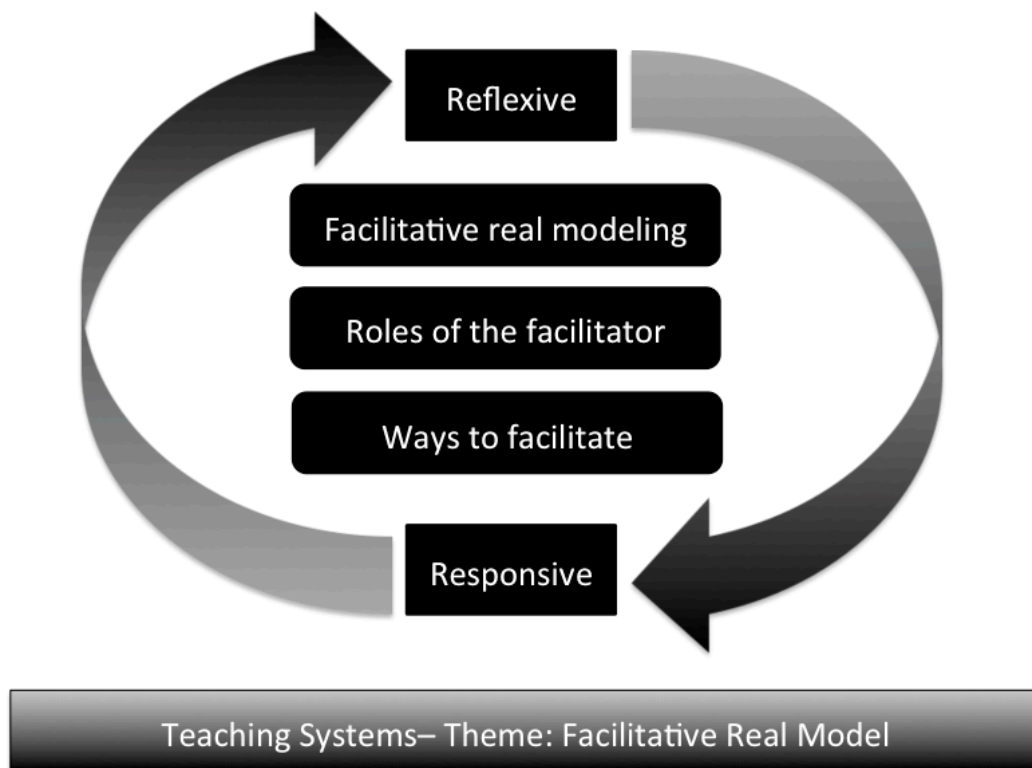


Figure 4. Teaching Systems- Theme: Facilitative Real Model. Author's figure each unfolding moment on multidimensional levels, in concrete and abstract ways. Transformative teachers are experts at making meaning and providing models of all types. They are reflexively and responsively self-reflective, which

allows transformative teachers to step into different perspectives for seeing through the learners' eyes in unique situations across the entire systems schematic, for lighting the pathway out of ambiguous or complex situations. Transformative teachers focus on improving how they facilitate experiences to evoke student curiosity and provoke inquiry that are meaningful for integration into the students' real life context. Transformative teachers change to meet their students' needs by constantly facilitating new ways to think, learn, and navigate systems that are more relevant to their students' lives. Students learn self-transformative growth mindsets by attuning with the transformative teacher as a real model, entraining to the teacher's rhythms of making meaning as needed for support.

Classroom systems-model: Context management.

The remaining two models together form the theme of context management, classroom and school-wide systems. These systems make it possible to facilitate a space where transformative teaching can unfold. The model of classroom systems, figure 5, is comprised of five categories that the transformative teacher focuses on managing and mediating through engaged interconnectivity with the students. The relational container is a microcosm of the real-world as mediated by the transformative teacher personal way, style, energy, or vibe. The cultures is resultant from the way students respond to the boundaries and expectations set by the teacher, the psychological and social support structures giving shape to and holding up the relational container.

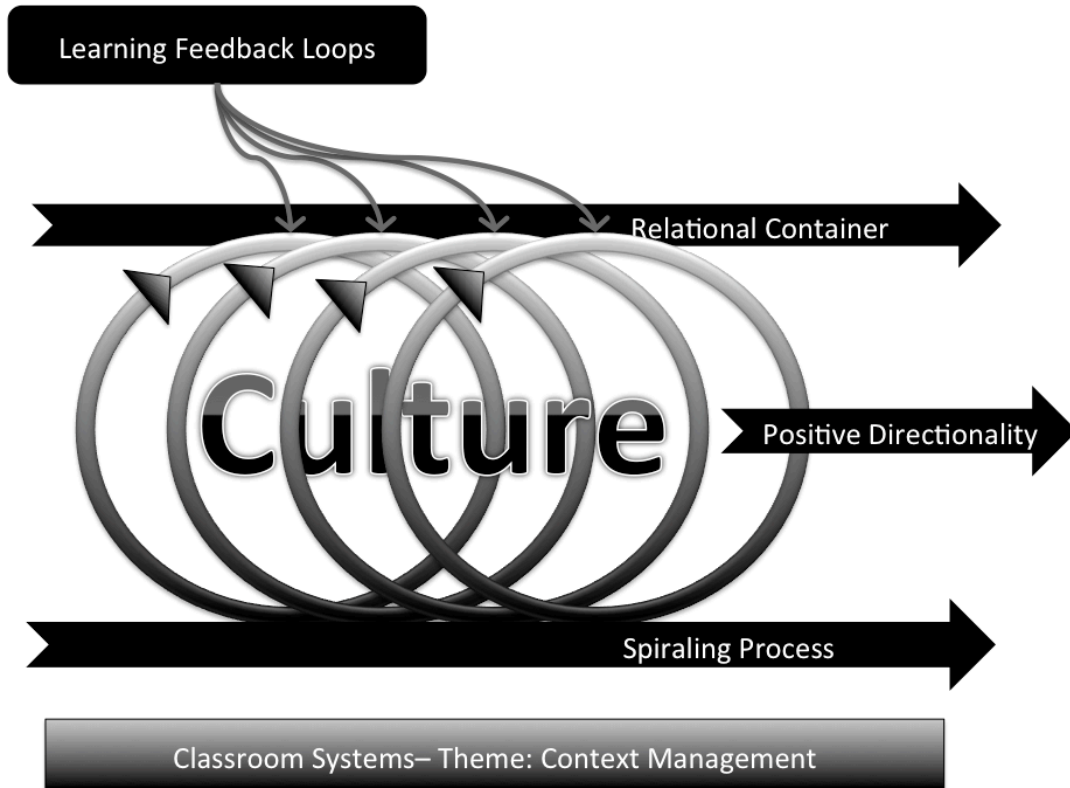


Figure 5. Classroom Systems- Theme: Context Management. Author's figure.

Learning feedback loops are created through the reciprocal exchange of meaningful feedback to assignments and continuously evolving intellectual rapport. Maintaining critical positive directionality happens by highlighting positives, a lot, shifting assignments into cyclical learning structures that progress into spiral processes that can intellectually grow and deepen.

School-wide systems-model: Context management.

The school-wide systems manage the context in which the school is situated, in communities and their psychosocial economic politics - the setting of the transformative teaching story. Figure 6 is a model for the relationship between three components that tone and constrain the rhythmicity of learning dynamics through school-wide context management.

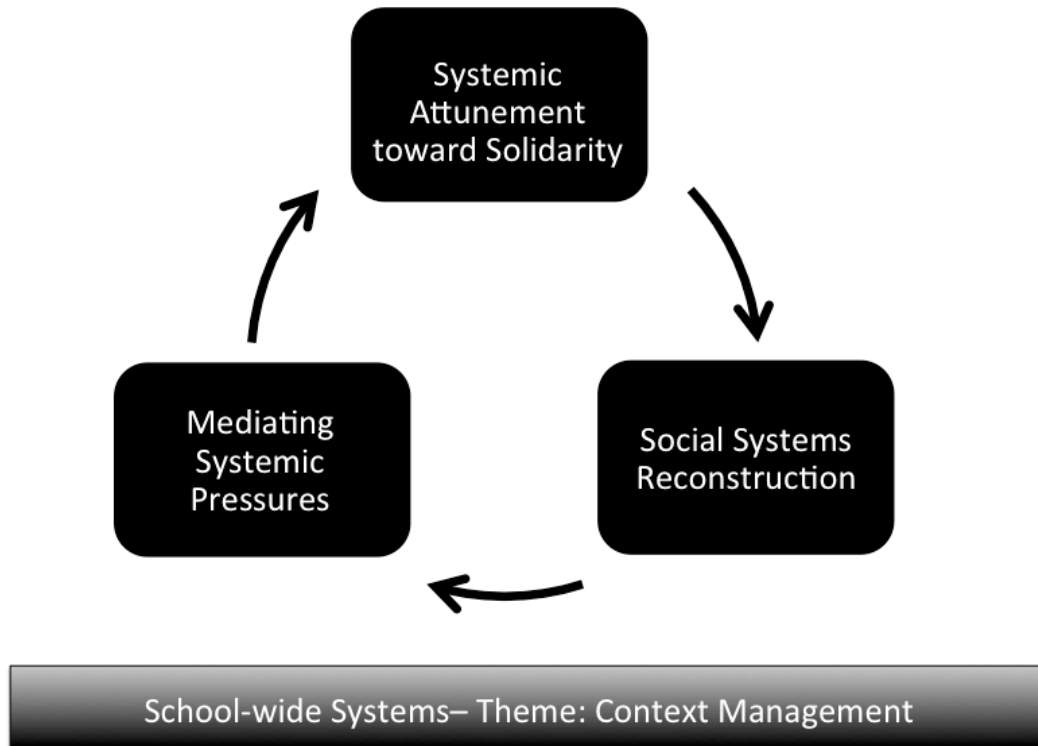


Figure 6. School-Wide Systems- Theme: Context Management. Author's figure.

Systemic attunement toward solidarity relies on social justice as a direction to drive recognition of systemic imbalances perpetuating oppressive rhythms. Social systems reconstruction is the re-negotiation of power and social structures to shift perception of what intelligence can look like and how education can lead to improved social mobility. The school-wide systems maintain the structure that holds the school together and mediates the pressures of internal and external systems impacting the students' intersectional positionalities.

CHAPTER 6: DISCUSSION

TPST proposes a multidimensional vision of systems that transformative teachers are engaged in through pedagogical practice. The following theoretical discussion offers psychological literature to demonstrate that the theoretical concepts and TPST model that emerged from this research align with existing literature, so that it may become more useful for teachers desiring to improve their practice. Borrowing from the field of clinical psychology, the subsequent discussion triangulates the findings of this research with a socially constructed liberation psychology for clinical practice (Afuape, 2011) and an integrative systems theory of rhythm entrainment in interconnectedness (Norris, 2018). Based on this triangulation, the TPST proposes that transformative teachers liberate the psyche through rhythmic interconnectedness. Cocreating empowered worldviews can be expanded by attuning sense making, an intuitive preverbal meaning making process (Zittoun, 2017), and clinical skills for working with the rhythms of the psyche (Caplan, 2018). The transformative teacher tunes into the sensate field, the resonance and sync of the classroom ecology (Bache, 2008), to facilitate transformative moments by coconstructing rhythms of emancipation, opposed to alienation (Alhadeff-Jones, 2017). These major theories and extant literature, discovered in light of the research findings, guide integration of the research findings to form a pragmatic transformative teaching pedagogy for adolescent education by further development of a grounded theory on what transformative teaching looks like, as situated in an interconnected rhythmic systems panarchy.

Transformative Teaching as Jazz

To frame the discussion, consider the following analogy that was offered by a study participant, who was preparing to retire from a long career of teaching just a few months after their interview:

You know, teaching is like, I think I will use the analogy of, classical music and jazz. Classical is all, written out. Every section is written out, strings horns, percussion...it's all written out. But, in jazz, you have the basic melody, and after that, it's all about improv. . . .

You gotta be in touch with your kids, man, on the fly. What makes them tick? What's roping them in? What's hooking them? You know? And sometimes, it has nothing to do with the structures that they want us to follow, man, because our kids are human. Each child learns differently. Each child is motivated differently. And you have to teach each child like an individual. (R.O.)

In this quote, the participant highlights how the transformative teacher is a complex systems thinker who is reading the classroom, students, and content to create classroom rhythms and dynamics that engage the students to intellectually move forward. This idea of teacher as jazz musician conductor is also metaphorically similar with another idea from the findings: the idea of teacher as facilitator, or teacher as resource.

Now, we are talking about the teacher becomes a resource. The teacher becomes a facilitator. You can acquire, and inquire, and bounce ideas off of the teacher. So, now the relationship, now the student sees the teacher, that group sees the teacher, as a potential resource to maybe bounce ideas off, check theories. . . .

What the teacher does is remain in the facilitator role. The teacher does not necessarily give answers, but pose other questions, and maybe prod them, or move them in a different direction, or propose new questions. The teacher might identify that there might be something wrong with the direction they're heading in. And, how do you ask questions that surface the problem—rather than saying, "This is wrong." . . .

So, the facilitator role changes the relationship. The student always remains the owner of that knowledge, and the teacher is just facilitating the development of the student. And that student is asking questions of the teacher. The student actually is developing a sense of agency, and the teacher becomes that resource. . . .

And now the teacher as facilitator has to think around the possible errors that are occurring, and what are some of the questions they can suggest students begin with to address their errors? And so that doesn't happen in the traditional way, you turn your paper in, the teacher grades it and they give it back to you, right? (H.L.)

The teacher as jazz conductor is facilitating the student as musician playing their instrument, developing their own agency as a member of a jazz band.

Transformative teachers engage with their students through tuning, understanding, vibing with, jamming together, and redeveloping the music they play as a class and as individuals—learning to play their best notes in concert or solo.

Another participant talked about getting to know their class over the course of the school year in a way that can be seen as similar to how a jazz conductor might get to know a band over time, with different variables impacting the sound created as a classroom system. This particular participant was really clear about the importance of not silencing the students or classroom, emphasizing the value of deeply listening to the rhythms and melody of the class. The following selection exemplifies the research findings by partially describing what transformative teaching looks like in SFUSD. This selection of data is presented nearly exactly as it was spoken, however, it was almost a continuous monologue. Thus, the selection has been separated into chunks to weave in the jazz conductor analogy and is very lightly edited for readability, but still presented in the same order. Additionally, this individual spoke with an animated cadence and speed that keeps the listener hanging onto their words—at a rate of over 200 words per minute in some sections, while never dropping below 170 words per minute, in a sort of pentameter. Interestingly, this higher-than-average rate of words per minute matches that of the most captivating modern lecturers

who have taught groundbreaking ideas to the general public via the Internet (Barnard, 2018). The participant was able to go into great depth on developing the musical composition of their classroom without very much prompting for clarity on the part of the researcher; all of my prompts as the researcher (H.) are included. It is clear through this following participant's (C.H.) description of their teaching style, that like a jazz conductor, they cultivate the sound and melody of students in their classroom to develop each unique voice into a harmony and rhythm that moves the intellectual flow of the whole class' learning forward.

In my room, you don't always have to raise your hand all of the time. I learned this, like, 10 years ago; I just, asked the question: "How many of you haven't said a single word, in any of your classes, all day long? Like, nobody talks to you, the teacher never talked to you, you never called out?" . . .

There were so many, especially shy Latina girls—that had not spoken at all—all day—in all of their classes. . . . I was like, this is insane—because some of us, all we do is talk—us teachers, right? . . .

Or, those students who are going to use their voice, no matter what; those are the students that are going to raise their hand, raise their hand, all of the time, cause they want all the—[motions adoration]. . . . And the others are just going to sit back, and take a really passive approach. . . .

I am like, "This isn't going to work for me." And, so, in my classroom, I am like, "You have to talk. If you don't talk, there is a problem." (C.H.)

It can be seen through this participant's attitude that their expectation was that every student would use their voice and communicate about their experiences. In applying the jazz conductor analogy here, it can be seen how the conductor would expect that each member of the band would show up to practice, ready to tune their instruments and practice playing their songs to the best of their ability. Here, the teacher holds the expectation that students will use their voices, in one way or

another, to contribute to the class' composition. When asked how they go about getting every student in class to talk, they responded pragmatically.

There's a lot of like, partner talk. There is a lot of what I call, controlled calling out. . . . So, here is how you hear those voices, who are too afraid to be in the spotlight—they will not raise their hands. But—they learn the rhythm, there is like, a rhythm. And, I don't teach it to them, but they hear it. . . .

It's like—I ask the question, and you get all these different voices, and if it's not right, or you're response is a little off, it's like—we'd ignore it, whatever, and we go with the better one, mheh [motions shrugging it off]. . . . But, at least you're not afraid to say it—because it's not, put out there, and like, everybody is concentrating on it. Right? They don't even know where it came from half the time. . . .

But, I'm paying attention, "Oh, yes! I finally heard that voice!" Right? . . . And then—they know when there's a question that should just be an individual answer. And, I'm saying, like, right about October, I've noticed that, they've gotten it. (C.H.)

The participant explained here that the class settles into its own rhythm, which the students naturally pick up. This is similar to how musicians who regularly play together get a feel for each other and are able to blend their sounds with more cohesion. They are even able to move forward though one musician may be dropping the beat, or are able to spontaneously make space for another musician to lead with a solo. Even so, like different bands' sounds are as distinctive as their members, different classes or sections can have entirely unique compositions, which the conductor must approach with an appropriately matching style. Below, the individual referred to in the selection had been previously described by C.H. as a grandmotherly teaching assistant, who the students loved for her storytelling. Notice how the participant talks about each racial background as if that cultural way can be looked at like a type of instrument that the student as musician plays in the classroom.

My seventh period, which is mostly African-American students, and, but its diverse—I mean, there are Filipino students, and White students, and there are Latinx students in there. . . .

But, in the African-American culture, they learn by talking. Like, that's what grandma Liana's stories were, you know? That's how they learn—so you can't silence them. The classrooms that they do the worst in are the ones where they are expected to be quiet. . . .

But, I'm like, "You can't be the only voices, and, your voices can't overshadow the other voices." So, a lot of that, step-up step-back, I teach them. That class probably has the most community feel, like, there is a great energy in that room. Like, we just love each other. . . . And even this Asian student that's really quiet is like, really part of it. There's just so much love in the room. (C.H.)

Some instruments are simply quieter than others but sound lovely to punctuate small spaces in the music. Other instruments just sound better when their notes can really move across a room: as the bass for a lighter, smoother melody. Not only do the different class compositions have a variety in rhythms and styles of voices, they also have varied levels of abilities. Some students are playing more complex rhythms while there are various levels of support for the students who enjoy participating in the more rigorous tunes but are also in a process of remediating their skills through their IEP (individualized education plan). Some classrooms have an extra adult in the room—the right blending of the adult styles will support rather than detract from the rhythm and melody the teacher is working to cultivate. Conversely, a bad mix can throw off the power dynamics in the room and the teacher as conductor loses their center in the sound, making it more challenging to impact and shape the evolving music. The teacher is running the class by simultaneously developing and maintaining their own center of power as the facilitator in a multidimensional dynamic, while enforcing it by crafting good interpersonal connection with their support team members. In this selection,

C.H. shared how different classes have unique interpersonal dynamics; all of my prompts as the researcher (H.) are included.

C.H.: It's really different than my first-period class, which is mostly Latinx. There's two African-American students, and it's first thing in the morning, so they're kind of quiet compared to seventh period, and there's a few White students in the morning class. And, you know, they communicate, they do the same lessons. . . .

There are a lot of students with special needs in that class too, in first period but, I do have, really like, 6-8 students in each class that have IEPs. But I have paras or teacher's assistants there. Well, they're actually like, learning support specialist teachers themselves. But the support is necessary

H: Is it coteaching?

C.H. It's not coteaching; I'm the teacher but they're either circulating, or they are sitting down, and we sort of—without being so obvious—they'll like be in close proximity to kids that need it. . . .

I really vibe with those teachers; they get it, you know? They get my teaching, they get the students. This is very different than the other rooms where it would just be a really awkward thing. You know? I've taught with people sometimes that, mmmhm, the right energy just isn't there. . . .

So the whole day is just, the whole day for me its just like—in each class we have our own little family, our own little community, you know, our own special little thing. And if you make it that, then they want to come.

Together the members of the classroom develop their own patterns and blends of preferences for different learning styles and pace. They share their intellectual depth with each other by writing down their music, sharing their songs through the reflections they write out in class. They learn to hone their style of cadence, and find better ways of organizing the sounds of their mind.

H. So, it's like, a really strong container for classroom community?

C.H. Mhmm, yea, and, its like, I know them through their writing first. Because that's the place where they will open up the most. . . .

Then I do these identity presentations, and so, they've all prepared spoken identity poems, and then slideshows. They do this narrative presentation and they are up here, and some of them—

their voices have been very quiet. They've done partner work, and maybe, during controlled calling out we've heard their voice? But, they very rarely have been in the spotlight. . . .

And now, here they are, in the spotlight. . . . But it's time, and everybody's comfortable now—it's time. . . .

And you hear them, and they are talking about themselves, and everybody's making connections, or positive comments. Or, just, really finding, like, a good question that they have. Just trying to get to know each other—and build bonds. . . .

And it's so exciting, because now, it's not just me knowing them. Some of them I know so well through their writing, but the rest of the class doesn't know them, because they don't really speak as much. Now we know you.

The analogy is clear in the way the participant talks about that magic moment—where the individual steps into their own power, they hold the center of attention in the room and share their story, their unique way of sharing a song—a musician having their first solo as a member of a jazz band. And then the whole room has heard their song. Maybe not their best song, but a song uniquely theirs that does not compete with any other, because it is simply the way they play their own notes and everyone listened.

So the whole second semester, is like, that much better . . . because we've heard your voice. . . . You were up here, and unafraid to use it. . . . You all felt the love, and appreciation for it. (C.H.)

Once the class-as-jazz band has found its unique style—the way they fit together so each member has a unique and dynamic role—the conductor can truly understand what they are working with. Then they can begin building more complex music together, they conjoin in concert.

We are gonna do this event where everybody reads their excerpts, and this is all four of my classes together. And then, you know, the spoken word poetry. . . .

We are going to start expressing ourselves in a very unfiltered way, which is so unlike what they're used to. They're used to censors and it's not that. . . .

And they are like, “Do you have to have these things?”

And I'm like, "No, you don't, you speak from your heart, that's all it is, that's a poem. Yup, that's it. Great!" . . . And then I'm like, "And now we can work on the performance part, or whatever, but you've got something really, really precious right here." (C.H.)

Just like the jazz conductor wants to get the most robust and delicately complex music to flow from the tips of their musicians' fingers and sweetly out the mouths of their instruments, the transformative teacher wants to emancipate their students by facilitating them to find freedom in constructing the very music they move through the world to.

All of that, to me, is like, how you get to know your students. . . .

You're just building their capacity, and also their self-esteem. . . .

And you are showing them that, like, it has nothing to do with, you know, the color of your skin, or what society thinks of you, or what the hell is going on in your home. . . .

It's like, in this classroom, you can be successful, like, that A is yours. And you don't have to be as smart as this person, you don't have to have a reading level of this high, you just have to do your very best. And I always support the students with that, some need more help outside the classroom—and that's kind of where, you know, the independent initiative has to come from, the ambition on their own terms, it's on their own time. (C.H.)

In the role of being a resource for supporting students in doing their best—through facilitating students in developing their own rhythm and contribution to the classroom music—the transformative teacher as jazz band conductor must still have patience and openness that allows the students to move to their own beats. This participant pointed out that the student must be self-driven by "ambition on their own terms" (C.H.). Regardless of the teacher's ability for cultivating an evocative melody and captivating the focused attention of most class members, each student will need to choose to follow along, to be allowed to find a way to fit in with their own pace and rhythm.

Jazz is Distinctly Different

It is through deepening the conceptualization of teacher-as-jazz conductor that it is possible to begin answering the remaining major questions: What is the difference between good teaching and transformative teaching? Can adolescents engage in psychological transformation? And if so, how is that happening in consideration of Mezirow (2012), Dirkx (2012), and Kitchner's (1983) conceptualization of the role of epistemic cognition in an individual's capacity to engage in psychological transformation through learning? And how does this connect with Johnson-Bailey's (2012) stance that consciousness of positionality is the true marker for readiness to engage in transformation? And finally, what does that have to do with the panarchy theory conceptualization of systemic transformation points? Through following the data to re-imagine the transformative teacher as analogous with the jazz music conductor, a doorway is opened to re-envision the transformation point as a liberatory intersection of transpersonal interconnectedness in an emergent, participatory, panarchical ecology of systems.

The objective of this discussion is conceptualizing a pragmatic pedagogical system for transformative teaching that grounds the findings of this study in existing literature. Pragmatic approaches to counseling psychology and theories applying rhythm principles to meaning systems of the psyche are blended with the descriptive analogy of transformative teaching as jazz. The jazz analogy makes it possible to imagine what might exist between the gaps in the findings of this research study, but also functions to provide dimension to the many layers of

systems at play in classroom learning. The idea of transformative teacher as a complex rhythm analyst cultivating the transformative moment is expanded and bolstered with extant empirical and theoretical research. In essence, six themes emerged from the data: (a) concept of transformation, (b) relationship systems: relational solidarity, (c) real-world systems: attunement and entrainment, (d) teaching systems: facilitative real model, (e) classroom systems: context management, and (f) school-wide systems: context management. Through the transformative teacher's capacity to see the complex systems patterns unfolding across the multidimensional panarchy in which teaching and learning takes place, they are able to engage as a coparticipant that guides and facilitates the flow and movement through classroom learning rhythms. The analogy of transformative teaching as jazz music represents the transformative teacher's ability to see the underlying structures and processes while conducting the flow of energy and movement in the complexity of learning dynamics.

Pedagogical scholars Tomlinson and Germundson (2007) presented an articulation of the difference between what is considered traditionally good classroom teaching and those classroom teachers who have that essential element, something that is special which makes them great, and makes them transformative. They argued, "like jazz musicians, great teachers blend sounds from different traditions, hear and echo students' rhythms, and improvise on a dime" (p. 27). Tomlinson and Germundson believe that good teachers may indeed use different notes and rhythms to create expression, syncopation, swing, polyrhythm, call-and-response, or improvisation. Good teachers may create

beautiful, engaging, and functional curriculum, or they may be able to pick out a wide variety of independent patterns in the classroom. It is true that

different teachers create jazz in different ways in the classroom. But excellent teachers always create it. . . . A great teacher can't settle for less than reconfiguring the minds of students in ways that make them more fully human. Doing so day after day calls on the teacher to combine four essential elements in a jazz-like fusion: curriculum, connections with students, instruction, and assessment. At any given moment, one element may be in the forefront, but the others must be nearby, about to enter the mix. (pp. 27–28)

So it is not that transformative teaching is not also good teaching, indeed it is.

However, it is also that transformative teaching is always working on the emergent edge of what is happening in the room to be sure that improvisation is combined with structure to provide the most excellent version of the lesson possible for those students. To use Tomlinson and Germundson's description of the jazz rhythms in excellent teaching, transformative teaching is

the sound of a teacher working in a setting attuned both to individuals and ideas. Curriculum centers on a search for meaning. Knowing students as individuals motivates both teacher and students to do the hard work of making meaning. Instruction becomes the vehicle for ensuring learning among diverse individuals. Assessment informs the process. It sounds a lot like jazz. (p. 31)

Tomlinson and Germundson's explanation of teaching and jazz describes excellent teaching as a way of reconfiguring the minds of students so that they are able to make new meaning based on the design of their learning experiences. As discussed in the literature review, a pedagogical process of working directly with the students' meaning-making systems of the psyche has run up against challenges in educational theory; teachers and researchers are unsure of how to evaluate and resolve students' limiting learning-related worldviews. By re-envisioning transformative teaching as conceptually similar to conducting jazz

musicians and viewing the psyche from a social constructionist systems paradigm, it is possible to apply clinical psychological technique to develop a transformative teaching pedagogy.

Liberation Psychology

Afuape's (2011) work developed a psychology for navigating power, resistance, and liberation in the psychotherapeutic context through a socially constructed systems paradigm. This essential perspective was a grounding point for translating the research findings on transformative teaching into a theoretical model for what transformative teaching looks like in adolescent education and proposing processes for how it is actually happening in the classroom. Why apply a clinical psychology approach to classroom transformative teaching? Afuape's work on liberation psychology offered a social constructionist, complex systems approach to clinical practice, which can pedagogically be adapted to teaching in a classroom setting. Using Afuape's (2016) approach is valuable because it allows the practitioner

to join with clients to co-construct enabling narratives that sustain preferred identities, activities and relationships and directly challenge oppression. [This approach takes] a critical stance towards taken-for-granted knowledge that is always historically and culturally specific; reality is viewed as co-created in daily interaction and socially constructed through social discourse. Narratives are always informed by multiple levels of context, illustrated in the [Coordinated Meaning Management] framework, which explores the impact of bodily, personal story, interpersonal, family, community, cultural and political contexts on our actions (contextual force), as well as how our actions shape the wider contexts that they occur within (implicative force or our responses). . . . Theories of resistance and liberations as they are applied in clinical practice start with the assumption that psychological distress should be understood in a social context and that the solution to mental health problems is oppressed and marginalized people being at the center of social change. (p. 403)

The use of narrative meaning making through Coordinated Management of Meaning (CMM) (Pearce, 2007) is established as a tool for working with the psyche that, when used through Afuape's frameworks of systems liberation psychology, can be pragmatically integrated into classroom management, content planning, school-wide systems, and teacher professional development.

Afuape's (2011) work speaks to a significant thread across the findings of this research study, a major concept that appeared in the data through individual relationships and the classroom or school as an extension of the greater social systems of modern society. The concept of oppression was discussed in three significant ways: (a) how the transformative teacher detrans students from oppressive rhythms limiting their intellectual and emotional growth, (b) how transformative teachers reflexively manage nested classroom systems to disrupt and shift oppressive dynamics, (c) how schools and communities mediate and manage large-scale systemic rhythms to impact populations of students whose lives are suffering witness to deeply unaddressed systemic oppression.

What is systemic oppression? Afuape (2011) explained that oppression is a step beyond injustice; it is beyond not having justice and rights, beyond coercion, discrimination, and dehumanization by dominant social groups. Oppression is all of injustice through a misuse of power; it means to literally press on or against "in a way that creates and sustains inequality" (p. 57). Systemic oppression, then, can be understood as systems that are organized in a way that misuse power through injustices such as coercion, discrimination, and

dehumanization to perpetuate and sustain inequality at the expense of nondominant groups.

Thus, Afuape (2011) defined liberation as an evolving, perpetual “process of resisting oppressive forces and striving towards psychological and political wellbeing” (p. 58). Afuape argued that using a systems approach to psychology is pivotal in developing liberatory mindsets “because of its focus on relationships and social context as well as a desire to be respectful of diversity and difference” (p. 19). Afuape posited that the therapist, an individual in a position of power much like the teacher, “has the potential to uphold hegemonic interests of dominant groups and can act as a form of social control, by influencing people to fit into pre-existing norms of acceptable behavior” (p. 30) within inherently oppressive social and psychological systems. Thus therapists (teachers) have the professional and ethical responsibility to their clients (students) to foster the transformative process of liberation. In consideration that clinical psychologists are often focused on fostering transformative moments one-on-one or in small group settings, a challenge is raised in understanding how to conceptualize cultivating this in nontherapeutic settings like classrooms, often with one teacher and up to 38 students.

Resistance Becomes Creativity

According to liberation psychology, “by valuing resistance” (Afuape, 2011, p. 23) in the classroom, the teacher “might minimize the negative effects of power (such as domination) and maximize the positive ones (such as collective power; resistance against structures of dominations and coordinating the power

from within of both the [teacher] and the [student])” (p. 23). The teacher facilitates processes of activism by empowering students to speak out and speak their truth through honoring the students’ resistance as an access point to their creativity and intellectual flow. Afuape (2011) explained that resistance in a system is a parallel symbol for creativity in relationships. “Creativity is an important component of liberation because liberation inevitably requires vision of a better cultural, ethical, and political order” (p. 198). The act of daring to develop and dream a better vision than compliance with the status quo social order in an oppressive system is in itself an act of creative resistance. In such a circumstance, resistance is against the prevailing benefactors of that oppressive system.

Even jazz musicians, like students, come up against the constraints of their own psyche systems and need to get creative to work around seemingly unsolvable problems on the spot. Afuape offered the analogy of jazz in the confrontation of systemic constraints:

When I think of jazz scat singing—improvised melodies and rhythms using the voice as an instrument in place of an instrumental solo—I am reminded of the creativity that emerges when we run out of options and choices. Although scatting was originally a substitute for words when a singer forgot his/her lines, it has developed into an ingenious, technically challenging and exciting form of beauty. Creativity is thus what we do with life, in the face of what life does to us. (p. 198)

Like a jazz band conductor recognizes each musician’s different set of skills, instruments, and preferences, the transformative teacher takes into consideration each student as a unique compilation of cultural, social, and psyche systems that results in an individual’s worldview and social positionality. Acknowledging and remaining open to the individual student’s resistance opens the possibility for the teacher, or the person in the position of power, to hold space open for creativity.

They do this by engaging with the students as coparticipants in the process of developing and deepening interconnectivity, reciprocity, and reflexivity in relationship through writing new rhythms, meaning systems, or narratives that can be more useful to the student and even the class as a whole.

In working with resistance in the classroom, the transformative teacher understands that they must know how to handle a student's resistance that may potentially cause harm to other students and their learning. They preemptively plan with sensitivity to potential resistance and disruption. The transformative teacher works to develop social relationships, context, and responsibility in a way that undermines abuses of power and disrupts the coordination of social manipulation for gain of power. The transformative teacher turns resistance and power dynamics into tools for creating new meaning and narratives from situations. They understand that what may feel like creative resistance to one individual may be experienced as destructive resistance to another—what may feel rigorous but supported to one student may feel overwhelmingly complex to another.

Solidarity

In a move that rebalances power in the context of liberation psychology, Afuape (2011) depathologised and re-envisioned trauma as an implication of the cultural, social, and political environments. This panarchical ecology acts through systemic forces to imprint the individual's psyche during lived experience within these oppressive systems. From this perspective, a psychology for liberation is inherently political. The process of becoming liberated from oppressive systems

requires developing a political consciousness of social dynamics and a psychology that appreciates justice from a place of empowerment.

A component of building relationships that makes it possible to truly be an ally in an individual's healing process is what Afuape (2016) defines as being in solidarity, particularly in the context of working with adolescents. Afuape puts psychotherapeutic language to the way this research study's participants emphasized the importance of being in the kids' corner, of truly being there for the students in a way that puts their needs and reality into the focus. Afuape explained that being in solidarity with adolescents means respecting them as agents of their own liberation while standing with them against the forces that invalidate and pathologize their experience of systematic oppression.

According to what many of the participants in this research study had found, rewriting and reframing narratives with students is an essential tool of the transformative teacher. In addition to the theoretical lens offered by liberation psychology, Afuape's (2011) work also grounds the significant thread through the data findings that sews together using structure and systems to address and rewrite oppressive narratives imprinted on and replaying through the psyche. Similar to Dweck's body of research (Dweck, 1986, 2006; Dweck & Leggett, 1988; Dweck & Wortman, 1982) developing the concept of growth mindset discussed in earlier chapters, Afuape's techniques center on developing a new mindset, not just a growth mindset, but a liberated mindset. Liberation psychology's focus is on using coordinated meaning management, narrative reframing approaches, and critical, overtly political language to identify and make new meaning from

traumatic imprinting on the psyche resulting in oppressive mindsets. Then new context is rooted in the psyche by supporting the individual's consciousness development through reflection around their structural condition, their unique social positionality and intersectionality in the panarchical ecology. By shifting away from believing in terms of pathology and illness as the result of being victimized, the individual is empowered to understand that their trauma is the result of conditions and variables that can be changed.

Offering the individual the opportunity to make this choice strengthens their voice through affirmation from empowered decisions that alter their condition, thus resulting in a relief from the cognitive dissonance that comes with forced entrainment to oppressive systems and rhythms. In this study, transformative teachers focused on creating opportunities for students to make empowered choices, which strengthened student voices by alleviating cognitive dissonance from entrainment to oppressive rhythms. This detrainment can be resultant of making socially oppressive power dynamics explicit and transparent, showing students ways they may not have even realized they were attuned to patterns they did not personally resonate with, or were participating in their own subjugation.

Interconnectivity Through Systemic Transformation Points

Thommen and Wettstein (2010) proposed an additional, useful theoretical perspective that offered solutions to methodological issues in studying system transformation points in social systems—and the relationships that form the surrounding processes as they unfold over time—in terms of the education

system and the teacher–student relationship. Thommen and Wettstein posited that the conjunction of systems at any given transformation point is impacted by greater variability than a conceptually hierarchical structure can allow. In order to understand the interconnection of seemingly separated systems, Thommen and Wettstein looked to the relationship between the psychological processes (worldview) and the social processes (behaviors as manifestations of worldview). They explained that categorical or hierarchical distinctions create paradox when logically reconciling the relationships because claims of directionality and causality demonstrate that “when investigating the mutual influence of individuals and their (social) environment, it is problematic to think in terms of part–whole hierarchies; this leads to inextricable logical problems” (p. 215). They propose that a multidimensional systems model with distributed interconnections between structures and overlaid components, like a panarchy, exists in complex relationships through transformation (bifurcation) points that inherently impact and are impacted by the nested system of the teacher–student relationship within the classroom environment.

Specifically using the example of the teacher–student relationship in the classroom, Thommen and Wettstein (2010) conceptualized the person–environment relationship as a “process of co-evolution of psychic and social systems” (p. 1). They envision that the three seemingly separate systems of the teacher, the student, and the classroom are actually interconnected through their impact upon each other, functioning autonomously but mediated by variables within the environment and the student’s or the teacher’s own internal

psychological and social development. At this socially and psychologically constructed transformation point, there is a three-part process in the exchange: the teacher says something, the student decides what to do with it, and then the student responds; then the process is reversed so that the teacher responds to the student with a parallel format, creating a chain link pattern out of a three part exchange. The third interaction of exchange number one becomes the first interaction of exchange number two. The outcomes of these exchanges become cocreated by the teacher and the student together within the context of environmental parameters. This process involves a self-referential learning feedback loop, where incoming information, behaviors, resulting feelings or emotion, and other perceived sense data become integrated into an individual's constructed meaning-making system that is utilized in determining or creating future outputs, reactions, or responses. Each individual's self-referential meaning-making system is equivalent to a worldview. This is equivalent to the way that jazz musicians and the conductor are simultaneously engaged in receiving information and participating in creating novel sounds.

Utilizing Gunderson and Holling's (2002) concept of a systems panarchy (discussed in Chapter 3: Research Methods), linear directionality is removed from the relationship between different levels and cycles of the interconnected and interacting systems: while classical music is linear, jazz is not. In this light, Thommen and Wettstein's (2010) work highlighted the significance and vast impact of the socially and psychologically constructed, self-referential, and continually evolving worldviews of each participant. These components are

actually variables in the transformation point of the teacher–student exchange, in the midst of a great variety in interconnectedness, among multidirectional and multidimensional systems. This is comparable to how each individual musician’s training and knowledge of sound contributes to the music they are able to create with the whole jazz ensemble, with different groups of musicians having entirely different rhythms. Holling, Gunderson, and Ludwig (2002) identified that part of the challenge in demystifying the psychological construction behind each deeply limiting worldview is as follows: “These worldviews are also partial representations of reality; representations that are valuable because they provide temporary certitude to allow action, but whose partial nature ultimately exposes their inadequacy” (p. 10). In parallel, the teacher–student exchange is an operational process that is the manifestation of these worldviews, and they are acted out in the exchange. Working to understand the contributing variables allows this bifurcation point, where the exchange may go in several potential directions, to be influenced by the teacher shaping the variables so that it can become a leverage point that will foster transformation in the participants of the exchange. Thus, the teacher–student exchange is a transformation point that impacts not only the participants in the exchange but in turn the surrounding systems and possibly even more tangential systems. This is similar to how a musician may have a bad day and impact how the whole room, band included, experiences a performance; it is also comparable to how several musicians may improve greatly by practicing together, then spread their newfound repertoire of rhythms and melodies to other ensembles they play with. Or, an ensemble may

create a tune that goes viral on YouTube, inspiring millions of individuals to dance to their own note. Or comparably, when a video of an impactful class discussion goes viral, influencing not only the individuals in the classroom but others across social networks.

The concept of an interconnected panarchy of systems brings the discussion back to the guiding analogy of transformative teaching as jazz. The jazz band is an interconnected system of sound in which each musician with their instrument, is like their own nested system situated within a panarchy of systems that make up the classroom, then tangentially the school and world beyond that. Like the organization that brings together what seems like chaos in the systems panarchy, jazz music flows and develops through progressing improvisation. The idea of improvisation offers a way to see jazz music as emergent and cocreative (Humphreys & Hyland, 2002), parallel to the dynamic evolving panarchy of psychological and social systems. Humphreys & Hyland (2002) posited that the best “teachers, like jazz musicians, react to circumstances on the spur of the moment . . . excellent teaching, just like an effective jazz session, arises from the intuitive, improvisational, dynamic performance within a planned and mutually understood framework” (p. 8). They are well-prepared, practiced, and skillful improvisers. This conception of an alive and unfolding dynamic resting on a fluid foundation of structure is the basis of the comparison of excellent teaching to jazz.

Liberation is Jazz

Certainly, an exhaustive synthesis of extant literature relating teaching to jazz and integration into this burgeoning theory is beyond the scope of this paper.

However, a number of articles were found offering dimension for this comparison of jazz to these research findings describing transformative teaching. For example, Carpenter (2016) analyzed teaching that is more similar to classical music, in comparison to that which is more like jazz:

Jazz is a style of music, native to America, characterized by a strong but flexible rhythmic under structure, which often forms the backdrop for musicians to solo and to carry out ensemble improvisations on the basic tunes and chord patterns. That is to say there are rules but the musicians are encouraged to improvise around a theme.

If we see the curriculum as jazz then we can see that there are guidelines given but that the teachers are encouraged to “own” the processes and adapt the content, the presentation, and the organization as they see fit. In this way they can become curriculum “makers” as well as curriculum “deliverers.” (p. 3)

Through Carpenter’s conceptualization, a turn is made that considers the modernity of the psyche. The traditional structure of classical music may be needed to develop a technical skills-based foundation contextualized by historical sound evolution. However, musicians are able to truly develop their own creative capacities through learning to play jazz. This connects back to Afuape’s (2011) work in that liberation psychology is a turn from a traditional colonialized approach of the psyche, like classical orchestra, based on creative resistance and resilience driven by differentiation from the status quo. Liberation is jazz in psychology: a way of working with individuals that emancipates them from the constraints of their social positionality within the oppressive systems in which they live.

Facilitative Real Modeling

Sorenson (2016), a jazz music teacher and conductor, offered five ways that conducting jazz is different than conducting classical music ensembles.

Although these were explained in relationship to teaching jazz music, the underpinnings are parallel to parts of the findings on transformative teaching. Sorenson explained that like in classical music, the jazz conductor is still “responsible for all aspects of preparation and performance” (p. 1). However, the difference is in the way the jazz conductor (transformative teacher) reflexively shows up in front of the ensemble (class), the way they facilitate the music (learning), as a cocreation with the musicians (students), and their instruments (academic skills).

The first way that transformative teachers are similar to Sorenson’s (2016) jazz conductors is in the way that the conductor, or teacher, counts off, or facilitates setting a tempo. The teachers’ verbal cues establish learning style and rhythm for the particular lesson. They model the tempo through directly setting a tone with their hands, body, and words to indicate when the class needs to shift together. Secondly, like jazz conductors, transformative teachers understand that it is possible to over-direct the class, forcing students into a particular style and tempo that stifles their intuition and creativity. Aligning with Sorenson’s description of jazz, the transformative teacher sets the expectation that the students must listen to and be in tune with each other; the conductor is not the only member setting a rhythm that needs to be paid attention to. Students must be present with the other students and what their unique intellectual contribution is—over-conducting “does not encourage students to develop the necessary listening skills needed to be successful musicians” (p. 1). The transformative teacher knows that in order for good learning flow to happen, the entire class must be

attuned to each other. Depending on the cohesion of the class, the teacher as facilitator can almost step aside entirely when the flow of creativity is on.

Thirdly, Sorenson (2016) pointed out, that no one likes listening to a train wreck. The transformative teacher must responsively discern an ebb and flow that is moving toward cohesion and emergent creativity, listening carefully to be sure the syncing contexts and melodic dynamics do not devolve into chaos, making small adjustments to ensure no students or groups become too far off tempo, no longer accessing the lesson. The transformative teacher is able to balance group cohesion with opportunities for each member of the ensemble to show their intelligence through solos that highlight both skill and conceptual imagination. The fourth distinction that Sorenson offered was that the jazz conductor stays present with the musicians in the task of the performance, always there to support with no purpose for their own spotlight solo—the transformative teacher is present in solidarity as a facilitator to offer real models as scaffolding for the students learning. This is opposed to the classical conductors that separate themselves from the ensemble, expecting accolades of their own, as if the conductor were the soloist while the musicians are the chorus: the traditional teacher talks, students listen and respond when required only.

The fifth and final component of being a jazz conductor that Sorenson (2016) highlighted was the importance of engaging the audience by connecting about elements of the performance, through soloists telling, “What did they learn to be able to do what they did? . . . Why did you choose a particular piece? What about the composer or arranger?” (p. 2). Sorenson explained that brief and to-the-

point context offers a new lens and perspective for appreciating the music.

Comparatively, transformative teachers engage students by asking about their intellectual processes, how did they know what they know? Why did they choose that problem solving approach? What was inspiring about the author's idea?

Transformative teachers provide new contexts and symbolic anchors for reconstructing meaning and integrating concepts.

Although it may appear that the teaching-as-jazz analogy is limited to the way the teacher conducts the rhythms and systems of the classroom and the students as they go about their tasks and activities, it does extend across the social systems and into the systems of the psyche through narrative interconnectivity.

Using the comparison of teaching to jazz, it has been possible to see how the jazz music conductor acts like a liberation psychologist to their ensemble of students.

They work to develop each individual's skills and intelligence in a way that develops empowerment through voice and an ability to create opportunities to make their voice heard. Before an extrapolation of this idea can be done, the unifying concept must be defined: rhythm entrainment.

Rhythm Entrainment Through Psycho-Social Interconnectivity

Norris's (2018) theory on interconnectivity through rhythm entrainment was the unifying concept in this discussion because it was able to provide language for interconnected systems integrating the psyche through a science of systems—both socially constructed and physical.

Norris (2018) found that the language of rhythm entrainment is applicable to reframing the psyche, and therefore the concept of worldview, as a system

within a panarchy, in terms of music and sound wave science. Through his theoretical dissertation, Norris

(a) developed an integrative theory of entrainment as the foundation for a transdisciplinary field of applied rhythm studies; (b) challenged the assumption that entrainment is limited to psychophysical processes and observable, spatiotemporal perceptions; and (c) explored rhythm as an entry point toward the design of an embodied, participatory model of consciousness transformation. (p. iv)

Applying the same language across types of subsystems within a greater panarchy makes it possible to view the classroom as a musical system, most similar to jazz music. The music (the classroom) is an ecology of sound, where the conductor (the teacher) is facilitating processes in which the musicians (students) are able to optimize their instruments (their skills and abilities), to create and develop the strongest version of their own voice, the vibrations, sounds, and music through which they interact with the world. The student's and the teacher's worldview are thus constituted of the repertoire of music they know, styles they have practiced, different bands they have played with, instructors that have drilled in habits and technique, or other influences that shape how a musician plays their instruments over the course of their lives.

Through deep theoretical analysis of a systems theory perspective on the physics of sound waves, Norris (2018) defined rhythm as a measurement of flow that applies across a variety of systems. According to Norris, any kind of movement, mechanical or conceptual, is implicated by the existence of flow. The movement takes on a rhythm that is demonstrative of the pattern of flow: for example, students coming in and out of class, moving around the room to find their materials, or the pattern of which students typically are able to answer which

types of questions best. These patterns created by the systemic flow contain what Norris identified as archetypal rhythmic principles: pulses, waves, cycles, subdivisions, intervals, durations, repetition, and balance. Norris discussed the waveform principle, which is the idea that rhythm is a pulse-wave language. He explained that the language of waves—such as vibration, phase, or frequency—and the language of rhythm—such as flow, pulse and cycle—are linked through examples like sine waves, which are universal binaries due to their symmetrical, rhythmic oscillations. Rhythm is thus produced through a wide variety of types of phase relationships, creating synchrony, alternation, or harmonics. Norris contended:

Theoretically, any form of movement, communication, or activity can be transposed into rhythm in terms of being a flow pattern of pulses, waves, cycles, durations, and subdivisions. As a waveform function, one way to conceptualize rhythm is as the balance of opposing forces (e.g., on/off pulses) moving in time (e.g., wave). However, not all pulse-wave patterns necessarily move in time, as the temporal domain is just one dimension of rhythm that can be explored. (p. 336)

In addition to time, there are at least four other dimensions of rhythm entrainment: space, energy, information, and power are also recognized as dimensions across which rhythms can be found and entrainment can take place. These five dimensions play a significant role in the functioning and organization of classrooms, schools, and the entire education system. To a certain degree, students must consent to entraining with the school systems in which they participate, across all five dimensions. According to Norris,

Entrainment is the phenomenon whereby 2 or more independent rhythmic systems synchronize and become bounded together. Entrainment can happen with a variety of vibrations, such as sound, light, temperature, atoms, molecules, cells, and moving bodies. It acts as a calibration mechanism that influences perception, attention, and learning. (p. iv)

Thus it followed that rhythm entrainment is “a relational means of knowing” (p. iv) in the way that systems learn about and sync with other rhythmic systems. It is the result of a “fundamental force” (p. iv) of natural interconnectivity across multiple dimensions, as an “organizing principle of the psyche, and an absorptive state of experiential flow” (p. iv). Norris explained that the very idea of rhythm entrainment itself is based in systems thinking. The rhythms of a system describe that system’s multidimensional patterns of flow.

Entrainment of that system describes how independent flow patterns, either from the same or discrete systems, interact with each other or communicate across different dimensions. Norris (2018) offered that a vital piece to understanding how entrainment unfolds is through understanding the example, bounded pulse-wave patterns of relationship; a much more thorough explanation can be found in Norris’s work. The key entrainment principle, according to Norris, is how in phase and antiphase relationships, “different pulse-waves positionally align, temporally attune, and energetically flow toward symmetry making or symmetry-breaking” (p. 335). Norris found that this waveform principle occurs during inanimate sync, interpersonal attunement, or spiritual absorption. Through entraining oneself to another’s rhythm and developing interconnectivity, individuals are able to sync with, attune to, or absorb the patterns and rhythms they are immersed in or interacting with.

In other words, entrainment can be a form of training. Embodying a particular rhythm through repetition can help retrain—or rather, entrain—neurological, motor, and cognitive functions. From this viewpoint, any form of successful training can be considered a form of entrainment. Reinforcing even the slightest shift in phase oscillation can bring forth a new worldview, which has the potential to systematically shift physiology,

beliefs, likes and dislikes, attachments, attractions, realities, and interpretations of those realities. (p. 243)

Thus, the concept of rhythm entrainment and Norris's application to consciousness transformation is used in conjunction with the analogy of transformative teaching as jazz music to further discuss the findings of this study.

Norris's (2018) articulation of rhythm entrainment principles as an underlying structure for the socially constructed meaning-making systems of the psyche offers deeper credence to Mathisen's (2015a, 2015b) theoretical research on rhythmical transformations in teaching and learning. Mathisen found that the common thread in the work of three esteemed pedagogical scholars is the concept of applying rhythmic principles to teaching, providing pedagogical grounding for the conceptualization of transformative teacher as a jazz musician conductor. Mathisen developed Whitehead's rhythms of learning, Steiner's massive body of work on the students–classroom as interconnecting rhythmic systems, and Lefebvre's conceptualization of the teacher as a rhythm analyst. Mathisen brought coherence to these three concepts, offering a vision of multidimensional systems in which rhythms of teaching and learning are happening across the classroom as an ecological space. This ecological space includes multidirectional interactions between the teacher and students, their minds as psychological systems, and at the unique intersection of each individual's socially constructed positionality. The systems Mathisen described fall into categories Norris identified as the five dimensions rhythm entrainment; Mathisen found that these occur in both natural and socially constructed cyclical patterns.

Sense-Making Through Rhythmic Attunement

Transformative teachers use fine-tuned sense-making skills to intuitively stay two steps ahead of their class so that, without even forming the words in their mind before speaking, they can preemptively adapt their own rhythms on the fly to create space for the students' resistance, to engage their empowered voices. Zittoun (2017) explained that sense-making is intuitively applying meaning to an experience, which is how students pick out and understand the rhythms and patterns of what they are learning before they decide what they will attune to or entrain with—what they will add to their own rhythmic psyche. Once they decide to resonate with a particular rhythm, they entrain with it to become more familiar with its deeper aspects. Sense-making is the preverbal process. It is experienced on the bio-intuitive body level that sometimes results in a fight-flight-freeze readiness, resulting in emotional shut-down or acting out. The experience of the sensory input can be mainly symbolic and abstract in the mind, or can be felt as sensation in the body. Then the sense-made information moves forward toward integrative meaning-making, a more committed process of engaging with the symbols and sense input to make connections with already crystalized knowledge in the psyche system. In the sense-making process, students are grappling with applying cultural or situational knowledge to a symbolic resource that represents a greater conceptual depth. In the classroom,

complex relational and thinking dynamics linking to objects of knowledge, other people, and specific situations . . . are usually oriented toward the mastery of shared meaning, yet are always accompanied by the person's sense-making of the situation and the objects of knowledge. (p. 3)

Zittoun discussed the importance of teachers using culturally appropriate symbols as resources in learning. These symbols as resources serve as conceptual scaffolds and the abstract foundation for building new sense and meaning-making from unfamiliar situations. These symbols are already present in schools, often found socially in terms of status symbols through branding on clothing or neighborhood-associated colors. The teacher can also become a symbolic resource through modeling a concept, a way of responding to a situation, or providing analogies that they know will make sense to their students. Students can be taught to use and develop symbolic resources to assist in sense- and meaning-making processes, for example, the techniques used by Afuape (2011) including coordinated meaning management and narrative reframing.

Working With the Rhythms of the Psyche

Caplan (2018), coming from the counseling paradigm like Afuape (2011), offered a deeper look at using resourcing and somatic-based sense input and preverbal meaning in a way that produces psychological integration and deeper personal knowing. Caplan's work offers a way to apply concepts Afuape offered from an established talk therapy position, through the embodied, often preverbal experience. Caplan's and Afuape's works are used in a turn from education to counseling psychology, because traditional pedagogy does not have expertise in healing the psyche. The psyche is the root of the worldview, and poor learning-related worldviews or learning-related difficulties are generally grounded in unresolved psyche issues. Thus, turning to clinical psychology expertise is needed to include how the whole is embodied and contextualized in the real world mind.

The embodied psyche is known through the lived experience of one's psychology as an active participant in learning. The psyche is not just the small part of the student's self that manages to fit into the systems at play in many schools and classrooms.

Caplan's (2018) work as a yogi and a therapist brought together language that provided a description for using three key components that ease the challenges of the sense- and meaning-making process. *Resources* can be sensations in the body, psychological symbols, or various objects, images, places, and relationships; *titration* is when new or difficult-to-process information is metabolized in small bits at a time on purpose; and *pendulating* is a rhythmic movement back and forth between the resource and titration. This process integrates the clinical psychotherapeutic techniques of meaning-making with the sensate somatic experiences of the body. Caplan provided an embodied method so the individual can learn to attune to their own somatic rhythms through self-reflection and release no-longer-useful constructs and complexes from the psyche. A facilitator can track an individual or a room through feeling into the sensate somatic information perceived in their body when entraining to the rhythm of the intersubjective space. Similar to Afuape (2011), Caplan (2018) explained that even resistance has a valuable contribution in the meaning-making process. Gently listening to resistance can open doorways to the psyche—resistance is actually an access point for learning how to intellectually move forward into new and improved rhythms. The three-part somatic process provides a guiding technique for not becoming embroiled by—or at least for reducing—triggers of

the deep psyche, which can be a challenge for students who struggle with issues like emotional overwhelm, shutdown, focusing, attention, depression, and mood imbalances.

Caplan's (2018) method is centered through the natural rhythms of the body and psyche, and thus can be adapted to the scope of a classroom teaching practice. The technique supports students in interpreting their embodied sense-making and often unconscious meaning-making experiences and offers an articulation of how neuroscience is being developed to back up somatic tools for working with the psyche. By listening through the body to understand the mind, an individual learns to interpret their own experiences for making new meaning that is not anchored in a narrative that no longer serves a purpose. Regardless of whether or not the teacher and student are aware of it, they are somatically processing sensory information before the meaning making process officially begins. A person can "feel it" before they even "know it"—like when a word is on the tip of the tongue, or they know a song but cannot sing it or drum its rhythm. Somatic therapy offers that by the teacher becoming conscious of this innate process in themselves, they will be more capable of tracking and responding reflexively to the experience of their students.

Classroom as a Rhythmic Ecology

Teaching students to understand their own sense-making experiences fosters stronger relationships through improved reciprocal interconnectivity. Norris (2018) explained that this reciprocal interconnectivity comes from tuning, attuning, and entraining to the rhythms psychologically—somatically or

intellectually. Bache (2008) discussed the concept of intellectual and collective consciousness as a sensate field in the classroom. Bache explored the resonance and sync that develops in the classroom, although he did not call it rhythm entrainment. Instead, Bache found that through deepening resonance and interconnection between the minds of teacher and students as a whole learning community—a classroom ecology—the individual members become more deeply familiar with each other’s perspective, often learning what it is like to see through each other’s eyes. Bache explained that if a teacher only learned to see through the students’ eyes, the students would never learn. Conversely, if the students only saw through the teacher’s eyes, the teacher would never understand what the students must still learn. The key then, “is to learn through both eyes simultaneously, to affirm both the truth of individuality, and the truth of the wholeness” (p. 33). As the class members become more familiar with each other, they all begin to see through each other’s eyes—peers know who will be quick to answer which types of questions, they try on each other’s styles and ways of doing things, and by the end of the year they know exactly what the teacher would say in response to a particular hypothetical question. They think: What would that student who is really good at this do first? How would this student think about solving the problem? What would that student do to get organized?

Bache (2008) found the emergence of phenomena pointing to students accessing each other’s way of thinking, demonstrating a class or group mind. A unified field of thinking becomes palpable, almost tangible, which the individual class members connect into to get a sense of how their classmates are receiving

and perceiving the information in the room. This resonant sensate field forms a layer of the classroom in the panarchical ecology, which is generated by the interconnectivity of rhythmic entrainment across multidimensional systems. Students can feel and sense which students are elevated or low energy, who is in a good mood, an avoidant mood, or a fighting mood. Similarly, they can feel who is into a task, who understands what is going on, and who has no clue what is going on around them. Arguably, teachers as well as students can tell who doesn't know because they choose not to, and who doesn't know because they are not able to. It is through participating and engaging with this classroom field, the community and container, that students and teacher can work together to overcome oppressive systemic dynamics by fostering the transformative moment.

Don't Break Their Spirit, Cultivate It

As participant R.O. shared, "I refuse, I refused to take their spirit away; no, we don't submit to anybody, and you have just as much right to express how you feel as anybody else here." Teachers and schools must have discernment to know if they are forcing entrainment or cocreating emergent transformative moments. This can be sensed through their own rhythmic empathy and openness, which are often used in psychotherapeutic skills such as Caplan's (2018) version of the somatic experiencing method. Caplan's method uses tracking to facilitate using pendulation for developing a rhythm between activities or tasks that are more challenging for the students, and tasks that act as resources for the students. To avoid forcing entrainment, which breaks down a student's natural drive, teachers must employ what Finlay (2005) calls *reflexive embodied empathy*: a

phenomenological method of sense and meaning-making through intersubjective relationship. The teacher or person in the position of power uses their embodied sense and meaning-making skills to tune into the student or class rhythms through a lens of empathy. Rather than pushing their own rhythms on the student despite their resistance, the transformative teacher practices attuning into what the student or class may be experiencing that is different from what the teacher can entirely perceive from their own positionality of privilege and power in the room. The teacher then reflexively adjusts their own rhythms to more gently invite the students to rhythmically sync on a different tempo or octave that makes it possible to engage and cocreate rhythms that blend into song.

By working with their sense-making skills and tapping into the resonant sensate field, transformative teachers make adjustments on the level of minutia, moment to moment, a back-and-forth rhythmic balance, to edge the class closer to what one participant described as “the pop” (W.F.): the aha moment, the transformation point. This participant had wanted to learn how to support their students’ growth better, so they embarked on their own experiential training geared toward learning how to facilitate transformative learning over the course of several years. The participant explained their own process of transformative education fostering a shift in their psyche:

When I first did [the program], they call it a “pop.” At the end of the weekend you are supposed to “pop.” Kind of, it sounds negative to describe it, but it’s not, because they do in such a great way, you feel safe the whole time. They literally break you down, deconstruct your ego blocks for like the whole weekend, and at the end of the weekend, that’s when they build you back up again. And so, when you’re at that point when they build you up, you pop, and you see the world as a different place, you see the world differently. It’s a complete shift in perception. . . .

It happened to me. And, most people who pop, you know, it lasts for like, maybe a day; maybe a moment, maybe a day, two days. Mine lasted for like four days straight—where I really felt like I was enlightened. Like, the colors were really bright, I was in the present moment. I was a teacher still at the time, I was really in my zone, literally just watching myself, observing myself. I was observing, you know, almost out of body, its really awesome, and I loved it. Then six months after that, I was still just like, really blissed out, I was at that high point. Because like, I had time to integrate everything that happened at that moment, but it wasn't like one of those things where I was like unstoppable. . . .

[The program] was very transformative, sometimes a little bit too fast. I definitely felt overwhelmed sometimes, at one point I actually shut down for like a year or two, just really like fearful of changing anything else. . . . So when you don't give yourself enough time to integrate that kind of transformation, typically, you feel really sensitive. I started having a lot of fear towards people, of being with people. Like with talking to them, being around them, it was a really, really, weird year. And that's when I started meditating because it helped me see I could get out of it—the fear. I was like, really depressed because of all that I realized. (W.F.)

Through that participant's experiences, they explained how much they learned about the importance of teaching students the tools to understand their own minds. Through their own transformation they discovered the sense of ease and empowerment that comes with reorganizing their own meaning-making schemata. That participant also learned how disorienting it could be to learn new ways to make meaning from one's own experiences, which completely change one's understanding of the world. This dichotomy emphasized the importance of setting students up for the transformation point, the pop, in a way that makes it possible for the student to feel relief from their own cognitive dissonance, to soften points of friction in their psyche's rhythmic systems for making meaning.

Fostering Transformation Points

Transformation points were identified in Chapter 3: Research Methods, which Byrne (1998) identified as pivotal intersections in complex systems at

which a bifurcation occurs. Holling (2001) conceptually developed Byrne's (1998) bifurcation points as leverage points, which can be influenced through systems dynamics to foster transformative outcomes. These bifurcation or leverage points were the foundation for discussing transformation points or transformative moments thus far in this paper. Alhadeff-Jones (2017) studied principles of rhythmanalysis to understand the complexity at the point of transformation, in relationship to education. Alhadeff-Jones's theoretical analysis essentially found that within transformation points, bifurcation can be pedagogically leveraged through rhythmanalysis to foster moments of emancipation in which learning occurs in favor of liberatory mindsets, opposed to moments of alienation in which oppressive systemic rhythms are perpetuated. Discussion of Alhadeff-Jones's work guides the conversation back to a foundational concept of this document's literature review, Kitchner's (1983) epistemic cognition.

Facilitating as Rhythmanalysis

Alhadeff-Jones (2017) explained that being able to experience critical reflection and dialogue in learning requires duration: they must happen across a temporal dimension, which Norris (2018) identified as just one of the dimensions of rhythmic interconnectivity. Alhadeff-Jones found that in learning, there needs to be enough time for processing and integrating information and argued that it is actually a political act for students to take their time in learning. Conversely, slowness is not necessarily better, as some learning tasks are better done quickly. Finding a particular tempo best fit for a situation is dependent on the students, the

context, and the actual task at hand. This idea aligns with Mathisen's (2015a, 2015b) discussion of teacher as rhythm analyst. Alhadeff-Jones (2017) explored the question, How do pedagogists find and define rhythms for completing specific tasks in a way that is meaningful for the learner? He called for developing language for rhythms in learning, which appeared to be answered in part by Norris's (2018) theory applying rhythm entrainment language to the psyche from a social construction systems perspective. A deeply thorough treatment of these two theories is beyond the scope of this paper; however, this would be needed to philosophically rectify their shared language entirely.

Alhadeff-Jones (2017) developed the idea that because time is (for the most part) a social construction, it is used in social systems as a lever for power dynamics. Time is the measure of change across the panarchical systems that intersect to define the way an individual sees who they are, how they behave, and what they learn. An individual's education is shaped by the convergence (intersectionality) of many temporal systems (social positionality), which create the rhythms of their lived experiences. Alhadeff-Jones theorized that time, both simple and dynamic, is a complex phenomenon occurring across dimensions and can be rethought of as rhythm, a key to understanding the composition of the transformative moment. This aligns with Norris's (2018) concept of rhythm as the measure of the periodicity of flow in a system. Transformative teachers shape and impact the classroom flow through facilitative rhythm analysis of complex systems interconnectivity.

Rhythmic Dissonance

Alhadeff-Jones (2017) used the term *constraint* to explain how the temporal dimension impacts or limits rhythmic potentials, such as the student's biological rhythm, societal developmental expectations, or time designated to each lesson. The term *rhythmic dissonance* was defined as “a conflict inherent to the tensions between the temporal standards that were defining [the experience or situation], and the temporal constraints that characterize the [rhythmic] environment [the individual] was getting accustomed to” (p. 1). Thus, an individual experiences cognitive dissonance when the rhythms of the psyche, which that individual had been accustomed to using for making sense and meaning, are in conflict with or have tension against the rhythmic ecology of a novel situation or experience.

Resistance is often to the dissonance that happens when the psyche is pushed to its edges through a forced rhythm entrainment to an inappropriately tightly constrained or loosely unconstrained system, both of which can take on oppressive qualities (Gelfand, 2018). Rhythmic dissonance continues until the limited rhythmic freedom results in “a considerable amount of constraints on a system” (Norris, 2018, p. 101) causing “it to spontaneously self-organize” (p. 101) in a novel way. Alhadeff-Jones emphasized the importance of raising awareness to the systemic constraints arising from discontinuities, or the experience of fragmented rhythms. These fragmented rhythms impact learning; they are incomplete schematic development of meaning that would have been ascertained from integrating rhythmic entrainment to a completed meaning

sequence. Constraints from significant discontinuities result in fragile systems that encounter challenges in re-organization due to low fluency. Relieving rhythmic dissonance is the catalyst for Afuape's (2011) creativity in the face of resistance to oppressive systems and can be explained by Norris's (2018) conceptualization of out-of-phase wave-form relationships and forced rhythmic entrainment.

Pedagogy discussed by Alhadeff-Jones (2017) aligns with Afuape's (2011) psychology for resilience in the face of oppressive social systems. Through understanding the history of institutionalized rhythmic entrainment, Alhadeff-Jones concluded that the rhythm entrainment of modern education is impacted by the desire to perpetuate the rationalistic and economical mindset of the industrial revolution. Conversely, Alhadeff-Jones found another lineage of pedagogy focused on the concept of rhythmic education, aimed at social reform of the conformity seen in education, emergent from the industrial revolution mindset. Rhythmic education is focused on individuals finding and following their own rhythms, while in relationship to the rhythms of others, and enveloping panarchical systems, in order to develop interconnected rhythmic harmony. Alhadeff-Jones explained that a significant constraint in education that teachers are facing is the contradiction of being required to follow institutionalized rhythms while simultaneously honoring the individual students' own rhythms or the varying needs of a learning process, and also ecological rhythms both inside and outside of the school; accommodating constraints like this can be extremely difficult.

Developing Epistemic Cognition

The concepts of rhythmic dissonance, and constraints tie the conversation back to Kitchner's (1983) epistemic cognition: remaining conscious of potential problem-solving approaches, evaluating conflicting knowledge, and engaging in solving ill-structured problems that may not have a single or any absolute correct solution. The capacity to identify and navigate systemic dissonance and constraints through accessing creativity is like learning to play jazz music that does not adhere to predefined sheet music. Thus, developing epistemic cognition is like the capacity to transition from being a classically trained musician to becoming a member of an excellent jazz band. Does the intellectual mind stay within the perceived constraints, or does it push back on resistance to create previously unseen possibilities?

Maggioni and Parkinson (2008), explicated in Chapter 2: Literature Review, identified that epistemic cognition is an action, "something that people *do* when they are prompted to reflecting" (p. 447) on what they consider and constitute as knowledge. Maggioni and Parkinson indeed agreed that the school context—which may include curricular expectations, community sociopolitics, institutional policies, and student contributions or lack thereof—does certainly impose significant constraints on the learning exchange, which need to be managed. The teachers' epistemic beliefs, epistemic cognition, and calibration—which is how accurately they evaluate their own expertise in a given area—are impactful constraints influencing ability to work with the unfamiliar epistemic patterns, periodicity, and rhythmic sequences of their students' psyches. Narrow

epistemic skills result in being unable to perceive how to support student intellectual growth, limiting facilitation and management of conditions that enable students' self-directed learning and development of epistemic fluency. Indeed, Maggioni and Parkinson found differing epistemic beliefs impact the teachers' capacity to select appropriate cognitive strategies in specific learning situations; the teachers' questioning, or lack thereof, about trustworthiness of information; and teachers ability to generate unique pedagogical styles that foster multiple types of learning discourses by blending the melodies and harmonies of their classrooms.

Similar to the concept of rhythmic discontinuities are hypo and hyper cognition, discussed by Wu and Dunning (2018). These concepts are useful in articulating what transformative teachers are identifying when examining areas of rhythmic dissonance and conflicting meaning. Hyper and hypo cognition define the boundaries of what an individual can learn based on what their psyche has the context and content to engage with. Thus, the transformative teacher is working to develop epistemic cognition through identifying significant blind spots and over generalizations in the students' worldview, which Wu and Dunning confirmed have greater impact on experience than usually realized by the learner. Maggioni and Parkinson's (2008) research supports the position that transformative teachers know that an individual's ability to develop epistemic cognition depends on that individual's capacity to learn how to work around their own hypo and hyper cognitive tendencies. Transformative teachers understand that grappling with an idea can often begin at either of these locations; they are constantly analyzing

rhythms in the classroom, their students, and themselves to detect areas of hypo and hyper cognition that are obstacles to learning.

In alignment with Bache (2008), the teacher as rhythm analyst identifies constraints and rhythmic discontinuities through tracking their own senses via the classroom energy field, the classroom ecology. Maggioni and Parkinson's (2008) research supports that the transformative teacher identifies a key missing piece needed to be able to view the situation in a new way, re-evaluating the situation using epistemic cognition. In agreement with Afuape (2011), the teacher is able to offer symbolic resources and scaffolding to bridge the gap in the students' understanding, which supports creating new meaning rooted in contextualized knowledge integrated in the psyche systems. According to Wu and Dunning (2018), in some circumstances the student will become able to see a gap, a discontinuity, in their worldview and search for scaffolding or new information to transcend their own hyper and hypo cognition.

Thus, epistemic cognition is a capacity developed through reflexivity when comprehending the distinction between a familiar or novel rhythmic experience. Epistemic reflexivity, as defined by Lunn Brownlee, Ferguson, and Ryan, (2017), is a step beyond reflection created by discernment in acquiring comprehension of a dissimilar rhythm, working around a discontinuity, or seeing from a perspective that is transcendent of one's own current worldview. The transformative teacher fluently identifies areas of rhythmic dissonance from their students' perspective to see what is needed for supporting their students in learning novel meaning patterns that at first may seem impossibly complex or

outside of that student's scope of comprehension. They use real modeling to make the oppressive imbalances of power, resulting from inadequate context or poor meaning management, transparent. They facilitate a moment when the student can realize the experience of rhythmic dissonance, an awareness of their resistance against an oppressive dynamic while conscious of their intersectional positionality. Teachers do this through applying their own epistemic skills where the student may not be able to, and then reflects back opportunities for intellectually moving forward that the student may not have perceived. Epistemic cognition is developed when the individual is able to re-attune the rhythms of their narrative meaning-making system, often temporarily at first, by reorganizing schemas to creatively construct newly synced harmonies, or perspectives.

Rhythms of Emancipatory Education

Broad scope and depth of detail are both needed to develop rhythmic attunement that can intellectually create harmony by comprehending systemic complexity, particularly one's own through self-reflection. Alhadeff-Jones (2017) posited that the power of education is in developing an individual's adeptness, resources, and capacity to make sense of, negotiate, navigate, and create temporal cohesion with the rhythms that organize their lives—or in developing their epistemic cognitive capacities, their fluidity and adeptness as a self-transforming learner. By understanding the sociopolitical power dynamics that constitute the rhythms of their lives, individuals are able to appreciate how to move through rhythmic systems toward emancipation from oppressive systemic power dynamics.

In liberation psychology (Afuape, 2011) the person in the position of power, such as the teacher, uses their own knowledge of the intersecting systems constituting the situation to perceive context for the individuals' resistance. The facilitator and the learner together engage in developing creative solutions to work around or resolve the discontinuities that perpetuate oppression. Through this lens, the teacher acts as a rhythmic mediator, an energetic conductor, a rhythm analyst. The teacher is a facilitative real model engaging with internalized and external systemic power dynamics by reflecting back ways to learn from and overcome the oppressive faculties of rhythmic dissonance resulting from discontinuous rhythms and forced entrainment.

Alhadeff-Jones (2017) defined *emancipatory education* as the continuing and evolving process of increasing empowerment and decreasing feelings of disempowerment. In consideration of the concept of temporal acceleration of rhythm, such that may be taking place in quantum transformations, Alhadeff-Jones posited that there are three parts to emancipatory rhythms. First, patterns are the foundation of periodicity in rhythms, which lead to question what patterns constitute rhythms of autonomy and agency. This is comparable to Norris's (2018) concept of autonomous bounded-pulse-wave patterns of relationship in complex rhythmic systems creating interconnected flow. Or, to Holling's (2001) panarchical systems driven by the tension between attractors and strange attractors originating both internally and externally while finding the balance between conservation and generating novelty in the face of chaotic systems dynamics. The second of Alhadeff-Jones's parts is the experience of repetition to

foster the development of one's own emancipation. This can be compared to Norris's (2018) concepts of attunement and entrainment taking place across what are called adaptive cycles in panarchical systems (Allen, Angeler, Garmestani, Gunderson, & Holling, 2014). The third part of Alhadeff-Jones emancipatory rhythms is the movement of rhythm or how rhythms change over time because of impact from other rhythmic systems. This is like rhythmic sync or resonance in Norris's (2018) theory; in Afuape's (2011) liberation psychology, this is where resistance and resilience become creativity like a jazz scat singer. In Holling's (2001) systems theory, this is comparable to the tendency either toward obsolescence of novelty by regression to a mean or toward devolving into chaos through dissolution of conservation principles.

Alhadeff-Jones (2017) concluded that emancipatory moments could be fostered and facilitated through engaging with, evaluating, and managing the classroom as an ecology of rhythms. The teacher is acting as a rhythmanalyst; they are sensing, intuiting, and learning to impact the rhythms of their students' internal learning and the external classroom. Emancipatory moments happen when an individual or whole class moves through a moment of transgression by identifying discontinuities and rhythmic dissonance, on to a new emancipation that happens when unity is achieved in the psyche from rhythmic sync, closing the gap of cognitive dissonance. Emancipatory moments happen when variables align to relieve rhythmic discontinuities from oppressive systemic patterns and oppressive systems perpetuating those patterns. The emancipatory moment happens when the individual's internal or the classroom systems shift from out-

of-sync wave-form rhythms to patterns of sync and attunement that flow into novel harmonies and melodies that result in liberation and emancipation of the student. However, these emancipatory moments are just one direction possible in the bifurcation of transformation points.

Alienation

While it would be lovely to argue that every time teachers intend to foster a moment in which emancipation and liberation are possible they do indeed succeed; this is, obviously, not true. Alhadeff-Jones (2017) pointed out that transformation points can equally bifurcate into moments of alienation, which is quite literally the opposite of becoming empowered against and liberated from the constraints of oppressive circumstances or one's own limiting worldviews. In alignment with Maggioni and Parkinson (2008), transformative teachers use their own epistemic cognitive capacities with relational solidarity and attunement to consciously and preventively reduce the risks of alienation in the classroom. It then follows, a teacher with limited or narrow epistemic cognition would indeed have difficulty cultivating transformation points that lead to emancipatory moments and liberatory mindsets, and may be more prone to perpetuating systemic oppression and structural violence through tolerating alienation, albeit hypo cognitively. Thus, addressing a teacher's ability to cultivate transformative moments would be grounded in an examination of limitations in their epistemic cognition and worldviews; the need for examining teacher's epistemic related capacities was also discussed by Lunn Brownlee, Ferguson, and Ryan, (2017). Alienating patterns, rhythms, and psycho-social complexes are constituents of the

very oppressive forces that are the catalyst for Afuape's (2011) resistance, to Norris's (2018) forced psychological entrainment. An objective of future research would be to further develop pedagogy for facilitating detrainment from rhythms of alienation in classroom transformative teaching.

Possible Future Research

Suggestions for future research include developing an integration of language offered by Norris (2018) with pragmatic skills from Afuape's (2011) liberation psychology, using pedagogic principles outlines by Alhadeff-Jones (2017), to create a way to share and talk about systemically contextualized meaning-making models for transformative teaching. In addition, further exploration is needed to fully understand the relationship between meaning-making rhythms of the psyche and cognitive-based principles, such as epistemic, hypo, and hyper cognition. Additionally, the idea of becoming a self-transformer through developing transformative mindsets deserves significant empirical study in comparison to Dweck's (2006) concept of growth mindset. In terms of socially constructed meaning-making and interconnected cognitive complexity, what are mindsets? Can an individual hold multiple mindsets within one's worldview? Is it possible for students to simultaneously hold empowered, transformative mindsets while still under affliction of internalized oppressive mindsets? Can it be empirically demonstrated that self-transformative mindsets are be teachable?

How then, could a student become a self-transformer? Do individuals always need to rely on a teacher for identifying the hyper and hypo cognition that is preventing their epistemic cognition from developing? Perhaps the teacher

could focus on engaging with the students' intellectual mind through developing the students' cognizance, executive control, and reasoning. In a qualitative review of empirical research, Demetriou, Makris, Kazi, Spanoudis, and Shayer (2018) found that cognizance is a three-part psychological complex triangulated from self-monitoring, reflection, and metarepresentations. *Self-monitoring* is putting words to one's own experience as it is unfolding; *reflecting* is mentally reviewing past experiences or processes to better understand what, why, or how a situation happened. Making *metarepresentations* is when self-monitoring and reflecting are combined to make improved meaning from past events intended to provide reference for future experiences. Thus, cognizance recodifies experiences to foster reorganizations of schemas to foster integration of new meaning with previously ascertained meaning to produce continuity for future interpretations and projections. Adept cognizance is the mediating protagonist correlated with high levels of executive control and reasoning. These three processes reflexively propel each other forward in adaptive cycles resulting in intellectual inquiry, as attentional focus moves from internal symbolic evaluative processes to external reality-based representations and back. "Cognizance is a higher-order monitoring process that registers the representations and sources of knowledge available" (p. 11), which allows the psyche to let go of no-longer-useful representations or forget about processes that have become automated over time. Cognizance is the cognitive complex of processes that is used when an individual determines if they are attuned to their own rhythms, entrained to a melody resulting in rhythmic dissonance. Cognizance, executive control, and reasoning could potentially be the

cognitive capacities contributing to resistance and resilience against oppressive systems. An area of future research would be to understand the role of cognizance, executive control, and reasoning in generating psychological novelty and creativity in the face of hyper and hypo cognition, perhaps resulting in developing an adept intellectual epistemic cognition.

If cognizance, executive control, and reasoning constitute the rhythmic system for monitoring meaning-making, what intrinsically drives this process forward? Riggs (2007) explained that *conation*—the cultivated will or intentional self-volition—may indeed drive the movement of psychological rhythms. The conative domain is contrasted by the affective and cognitive domains; according to Riggs, these three systems of the psyche work together to create meaning. The conative domain encompasses will, attention, and focus. Information is sensed and referenced against previous symbolic resources through the affective domain. Inferences are drawn, symbolic anchors are made, and meaning is integrated in the cognitive domain. In the conative domain, the will determines effort and intention based on a values system discerned through reflexive processes with the affective and cognitive domains. Riggs posited that understanding the role of conation in one's own psyche system may possibly activate and drive the individual's natural desire to learn. Conation is the factor that turns potential energy into kinetic energy through work. Conation is rooted in a sense of purpose based on values and is the drive that takes over when extrinsic motivation is apparently absent. Riggs recommended that teachers activate their students' conation by captivating attention, cultivating refined skills, and connecting the

content to the context. Riggs posited, “deep within the place where learning lives, is the human dimension, the conative domain, the will, drive, and determination to succeed...[through] metacognitive skills [that] can be enhanced as they encounter daily challenges” (p. 14). An area of potentially interesting further research would be to explore if will or drive for becoming a self-transformer could be developed through Demetriou et al.’s (2018) metacognitive skills of cognizance, executive control, and reasoning.

Limitations and Delimitations

This study was limited by the fact that it was conducted through interviews of teachers who were SFUSD employees, and that neither the students taught by these teachers, nor their parents, primary caregivers, or guardians, were interviewed. This limitation in participant selection meant that the study was not able to examine the process from the position of the student or their parents, who may have had insightful—probably even essential—ideas to share about the students’ experiences of transformative teaching. Coordinating data collected from students and teachers would be an essential component in developing future research on transformative teaching.

Working with a large school district provided an opportunity to interview teachers with a broad range of teaching expertise and styles, an intentional delimitation of the study. This delimitation offered access to unique perspectives and a multidimensional picture of transformative teaching practice through discussion with individuals who taught different subjects, grade levels, and have varying degrees of experience. In this way, the results were not limited to a

narrow worldview or social positionality. At the time the study began, SFUSD (2015c) employed 3,509 teachers district-wide (p. 2). The SFUSD (2015b) teachers had, on average, 11 years of experience (“Our Teachers,” para. 1). Compared to statewide teachers having an average of 13 years of experience (California Department of Education, 2015c, table), and nationwide with teachers having an average of 14 years of teaching experience (National Center for Education Statistics, 2004, table), San Francisco is comparable to the national average; this similarity may potentially increase likelihood that other teachers may be able to transfer what they learn from this research to what they see in their classrooms. This could also indicate that San Francisco teachers are younger than teachers nationally. Although it is an assumption, a younger teacher population may indicate SFUSD teachers could be more technologically savvy, with greater ability to access information, and therefore may be more familiar with a wide diversity in social positionality and worldviews. San Francisco is considered one of the most liberal and open-minded cities, in one of the most open-minded and liberal countries, in the world—both socially and politically. A teacher’s own worldview does indeed connect with the teacher’s ability to engage in and model worldview transformation, as discussed in Chapter 2: Literature Review (Maggioni & Parkinson, 2008). Further analysis of participant demographics, including their own worldviews, would be needed to fully understand the impact of the type of participant population on student worldview transformation. Participant demographics and worldviews unrelated to the research questions were not focused on in data collection or analysis, which limited the ability to

determine the variables that led the participants to becoming transformative teachers. However, due to the highly likelihood that reporting this information would reveal participant identities to their colleagues, such an analysis was not undertaken, nor did it appear to be essential for reporting the findings in terms of the main research questions.

A significant limitation to consider from the outset of the study is the atypical ratio in student ethnic diversity of SFUSD. The student population was 41% Asian/Pacific Islander, 23% Latinx, 11% White, 10% African-American, and 14% other or not specified (SFUSD, 2015b, “Our Students”). The California Department of Education (2015a, table) reports that statewide the student population was approximately 12% Asian/Pacific Islander, 54% Latinx, 25% White, 6% African-American, <1% North American Native, and 3% other or not specified. National Center for Education Statistics (2015b, Figure 1) reported that nationwide, the student population was approximately 5% Asian/Pacific Islander, 24% Latinx, 51% White, 16% African-American, 1% North American Native, and 3% other or not specified. These statistics demonstrate that the SFUSD student population was quite different than both the state and national student population. Considering that a large part of this study depended on variables constituting worldviews and social systems—such as values, beliefs, assumptions, and epistemology—the processes defined by this study could look different with populations other than SFUSD, due to the unique challenges that may come with addressing significantly different worldviews in the classroom. However, the unique challenges that are worldview and culture dependent do fit within the

transpersonal socially constructed systems theoretical framework, and are not thought to be a limiting factor on the transferability of the research findings to teachers of populations that differ from SFUSD.

Additionally, the English language learner population demonstrated a potentially significant limitation on the transferability of findings from this research. Although status as an English language learner does not guarantee a student's ability to hold multiple conflicting worldviews, it is possible that it indicates more likely exposure to conflicting worldviews. Working with students who are already familiar with multiple and possibly conflicting worldviews may look like a much different process than working with students who come from a socially isolated and homogenous population with little to no exposure to worldviews other than their own. English Language Learners constitute 27% of SFUSD (2015b, "Our Students"), about 22% of California schools (California Department of Education, 2015b), and just over 9% nationwide (National Center for Education Statistics, 2015a). There did not appear to be a large difference between reports of teachers working with English Language Learners versus English native speakers, possibly because all of the participants work with a large portion of students for whom English is a second language. However, the two participants who reported they taught classes specifically for students new to the US were particularly articulate about the isolating experience of being a newcomer.

Conversely, it appeared that the demographic statistical differences may have actually ended up being a delimitation. Due to the diversity in SFUSD, this

population of students is likely already required to hold multiple conflicting worldviews simply because they come from such a wide variety of backgrounds that do not align with the mainstream, White-dominated sociocultural paradigm. Thus, the teachers in SFUSD may indeed have offered a clearer understanding of the process of worldview transformation than their counterparts from more homogenous communities would have. Teachers too, may already have been familiar with the experience of transformation because of the Bay Area's cultural subfocus on intellectual and spiritual growth. These components may have made the dynamics of the district key to learning about students' experiences with worldview transformation and teachers' experiences of supporting and facilitating this process. It is possible these educator participants have had more opportunities to learn about being culturally sensitive, and more practice being ethical in respecting students' worldview of origin as they learn to navigate predominate U.S. worldviews. This focus on diversity, inclusion, and cultural sensitivity could have contributed to providing a clearer example of what successful transformative teaching actually looks like.

This research sits deeply within Fosnot and Perry's (1996) constructivist paradigm; the focus was on learning what transformative teachers were doing to foster shifts in their students' limiting learning-related worldviews. The most potentially significant delimitation of this research, the qualitative grounded theory research method, provided opportunity to participate in and engage more deeply in learning the pragmatics of transformative teaching as it is already successfully happening. As made clear in Chapter 4: Research Findings,

significant and large categories could have subsumed the entire analysis and discussion process of this study because of the magnitude and importance of the issues raised. However, by following the grounded theory method and focusing on developing an analytical abstraction that could contain big ideas such as race and oppression, the beginning of a pedagogical model for transformative teaching was able to be articulated through the discussion.

Fulfilling SFUSD Requirements

This research specifically addressed five out of the Six Strategies for Success outlined by SFUSD (2015a) as follows.

1. The research supported strategy one, the implementation of the SFUSD Core Curriculum, has been met through aligning with the Common Core Standards and fostering deeper understanding of the teaching techniques that have been successfully engaging teachers and students in overcoming limiting learning-related worldviews.
2. Strategy two, The Response to Instruction and Intervention model, was supported through research questions investigating tier one, two, and three teaching techniques and methods for instruction that foster more engaged classroom learning.
3. Strategy three, building a vision, culture, and conditions for college readiness was supported in that understanding how teachers have been successfully transforming limiting learning-related worldviews in SFUSD's unique student population provided a vision for how these exemplary teachers have been working to prepare students for college.

4. Strategy four was not met, as this research does not specifically address differentiating central office supports to schools or the Multi-Tiered System of Support.
5. Strategy five was met through developing a process model that may be used in developing highly qualified teachers, and then retaining these teachers through supporting improvement of their classroom communities.
6. Strategy six was supported as SFUSD has a very unique and diverse population of students and families with a wide variety of worldviews and belief systems, and thus working toward fostering transformations in limiting learning-related worldviews helps to build cross-cultural communication skills both in the student and faculty population, thus improving relationships with families.

Concluding Thoughts

The introductory anecdote to this study described two teachers in the same grade, at the same school, with nearly identical populations of students, curriculum, and resources. It is now possible to propose a model that explains the difference between these two classrooms, to see what it was that made the classrooms so completely different from each other. The transformative teacher took time, care, and skill in getting to know which rhythms moved which students, which types of energy helped the class move together on both high-energy and low-energy days. The transformative teacher rewrote and remixed their traditional classroom sheet music into New Age sounds to create a sweet,

engaging jazz music using classical notes that their students, both as musicians and audience, were already familiar with. They developed systems for students to follow or turn to when they weren't sure what to do, and used structures based in familiarity to build new complexities into the sound-wave harmonics in both the context of the classroom and the psyche.

Transformations can happen like the subtle building of a beat in the background to transition from one song to the next, or a cascade of shifting melodies that evolve into coordinated harmony. Some are gradual: they blend and fade out old rhythms; some are more abrupt, like moving the record needle suddenly, hitting the skip button, or the modern bass drop. They can happen as a whole class, across several classes, or the whole school. They can begin with one student, or within a group of students, and then spread like a tune that gets caught in everyone's head because one person was humming it. Transformative teachers use complex rhythmanalysis to foster the emancipatory moment within systems through which the teacher can perceive where transformations are possible, where it is possible to move the rhythms into sync. They coordinate the class through conducting the panarchical systemic flow through entrainment with students as musicians. They work in the small moments to identify continuities and discontinuities, finding the way rhythms naturally ebb and flow, so they can then foster rhythmic movement to shift the beats into attunement and resonance into novel harmonics and melodies that open up opportunities for new understanding. Transformative teachers are adept at cultivating awareness of the hypo and hyper

cognition that result in poorly developed epistemic cognition, and have the ability to generate novelty in the face of what appears to be systemic chaos.

Teachers cultivate willpower, rhythmic drive, or conation through fostering intellectual creativity by generating novelty in the face of resistance. The process of applying liberation psychology and rhythm entrainment like principles are used by the teacher to cultivate rhythmic learning dynamics to cocreate the emerging, participatory, emancipatory, transformative moments in which the individual learns to drive their own rhythms toward increased epistemic cognition capacities, which transformative teachers foster to produce transformative mindsets, like a jazz band could transform a classical piece with new life and freedom through play and flexibility in following the traditional sheet music.

The emancipatory, transformative moments happen when students see the narrative in a new way; a new piece of information they hadn't known or seen before suddenly brings the sound of instruments playing seemingly disparate rhythms together into a song. The relief from cognitive or rhythmic dissonance comes from learning from resistance and finding a way to co-engage in a way that turns resistance into participatory creativity. This is how students learn to write their own music, their own songs, how to rewrite, edit, and remix their own narratives using new stronger rhythmic undercurrents that come from a deeper purpose. Purpose is like becoming a talented jazz musician in their own right, learning mixtures of rhythms and playing their instruments that make it possible for the student to have a transformative mindset, to vibe with the transformative flow of jazz. By learning new rhythm, understanding how melodies work,

understanding construction of meter and pentameter, students learn to write narratives for their own liberated and empowered transformative mindsets that they can use to move through the world. The transformative teacher, the expert complex rhythm analyst, teaches their students to do their own rhythm analyses on the emergent edge of their unfolding lives while still maintaining consciousness of the musical context of tools, training, and history of sounds that feed and guide the music they put forth into the world.

Transformative teachers set up series of emancipatory transformative moments in the way they approach curriculum and instruction through relationships. They are aware that some lessons will have bigger impact on certain students' understanding, and simply will be more challenging for others to integrate. They plan based on the skills and abilities of their students that will be needed to engage in the complexities of a lesson's content. They build specific anchors and markers into the sensory and meaning-making processes to ensure students who will need support have it available, predicting which students' rhythms will be more challenged to sync with a particular conceptual dynamic. Still, transformative teachers continue to offer the students who are ready the opportunity to engage with the rigor in deeper rhythmic complexity. Managing the different types of student rhythms is similar to how orchestras and jazz bands have first seats or lead musicians as well as choral musicians that engage with the music after learning from their peers' lead, which sometimes acts as a mediator of the guidance coming from the conductor, facilitator, or teacher. Transformative teachers know not all students will approach a situation from the same perspective

and build space for this into the way they prepare their content and process. They understand stuckness and have a plan for intellectually and emotionally supporting students in moving forward. Transformative teachers understand breaking down a concept precedes breaking through in understanding the concept. They plan with a variety of tools for helping students break down concepts, like different musicians need different parts of a song broken down. Transformative teachers know that sometimes students need the same part broken down in different ways, due to their unique starting place or approach, based on the unique symbolic references and potential anchors in their psyche.

Through this research study it has become clear to me: it is not that adolescent students are incapable of engaging in transformation; indeed, they are. It is that adolescent transformation must be approached from a lens focused on the small moments that support students in gradually becoming a fluid, lifelong self-transformer. It is true that many adolescents may not have hardened ego rhythms that would be required for the psyche to undergo complete or quantum transformation, because most adolescents do not yet need to drastically transform. Most, if not all, adolescents are making small adjustments all along the way, subtle shifts that dramatically alter their understanding of the world and how they move through it. It is also true that adolescents do learn rhythms and patterns that do not serve them, which are in need of psychological transformation to change—albeit not in so much depth as an adult psyche may need in order to find more preferable, better-synced rhythms.

Engaging in self-development is a practice toward becoming more kind, honest, and creative with students. Transformative teaching is boundaried but not stuck in a box, while reflexive, respectful, dialogic, curious, and empathic. Transformative teachers can use rhythm analysis to work with resistance as a gauge and a doorway to creativity used for generating novelty. It is through the small moments of teaching and being present with students that the relationships are cultivated that are required to, over and over again, identify more nuanced areas of hypo and hyper cognition. Improved epistemic cognition happens in the small moments, when the teacher can predict that the student will be hyper or hypo cognitive in a situation and engages with the student to show them the patterns in their errors. Particularly through developing language for this with the student, and the teacher sharing their own meta-analysis of the situation, the student can become more deeply reflective on their own process and patterns that result in errors. Through reflexive comparison to the teacher as the model of a process, or structural model for the process, the teacher and student make sense together to agree on new meaning. The teacher aligns rhythms with the student, operating in sync around a situation, and the teacher resonates with the students' rhythms to see where the student truly is in terms of understanding the concept. The teacher supports the student through recognizing which parts of the melody were too challenging, then breaking down the complexity of the rhythms into more comprehensive pieces rooted in symbolic resources, which the student uses as an anchor for associating meaning.

The uniqueness of intersectionality and widely varying categories of positionalities in San Francisco was initially thought to be a possible limitation of this research, but in fact has proven to be the key for understanding what transformative teaching looks like when it is actually happening. The findings show that transformative teachers see the complex intersection of a student's positionality within a social system, including the psychology resulting from the worldview that is socially constructed based on becoming into that positionality. The teacher works within the classroom, administrative, and political boundaries to support psychological shifts in how their student constructs meaning based on that unique student's own understanding of their experientially socially constructed worldview, which may or may not have similar aspects to their peers. The transformative teacher works through building relationships, finding agreements around what is true, showing the way through modeling, and using meta-analytical feedback to guide students into experiences that reshape what the students see as possible and how they approach opportunities. This works and continues to develop based on mutual trust and rapport until the student is independently motivated as the result of experiencing psychological relief from conscious or unconscious cognitive dissonance. When the student reaches another type of, or depth in, limiting learning-related worldviews, the teacher is there to provide the next scaffold that individual needs to continue moving forward. When the individual no longer needs a teacher to leverage their relationship to push the student forward, they can be considered a self-transformer.

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APPENDIX A: RESEARCH APPROVAL, SFUSD



SFUSD SAN FRANCISCO
PUBLIC SCHOOLS

Research, Planning & Assessment Department • Program Evaluation & Research
555 Franklin Street, Second Floor, San Francisco CA 94102 • Telephone (415) 241-6156 • Fax (415) 241-6035

April 8, 2016

Holly Adler
California Institute of Integral Studies
828 Innes Avenue, Unit 110
San Francisco, CA 94124

Dear Holly:

Thank you for your request for San Francisco Unified School District's permission to conduct your research on the **A Socially Constructed Grounded Theory on How Classroom Teachers Foster Transformations in their Adolescent Students' Learning-Related Worldviews.**

Our office has reviewed your request and approved it. However, our approval is at a central, District office level and is contingent upon the approval of the principal and other collaborating individuals at the school site(s) where you intend to conduct your research. District approval in no way obligates any school site, teacher, principal, student, or other individual to participate in your study. You are required to obtain the permission and cooperation of all research participants. Please present a copy of this approval letter to the sites where you are conducting your research.

You are also required to submit to the Research Planning and Assessment Department a report of the results of your study when it is completed. In keeping with the District's commitment to professional development, it is critical that you share your work with the school community that assisted you in the course of your study.

Good luck with your work. Please feel free to contact me if you have any questions.

Sincerely,

Jan Link

Jan Link
Supervisor
Research Planning and Assessment Department

APPENDIX B: RECRUITING FLYER

We all want to know: What is that teacher doing so well it is making students transform right before our eyes?

Anonymously nominate transformative teachers to participate in a research study.

This includes classroom teachers, special education teachers, literacy /intervention specialists, principals, or coaches whom you believe to fulfill the following criteria:

A transformative teacher is skilled in fostering worldview transformation in their students. Worldview transformation is defined by Schlitz, Vieten, and Amorok, (2010) as:

A fundamental shift in perspective that results in long-lasting changes in people's sense of self, perception of relationship to the world around them, and way of being...transformation involves epistemological changes in how they know what they know. It is not only behaviour that changes, but also the motivational substrate from which that behaviour arises. It is not only a change in what people do, but also in who they understand themselves to be. (p. 20)

Slavich and Zimbardo (2012) defined transformational teaching as having the expressed or unexpressed goal to “enhance students’ mastery of course concepts, their learning-related skills, and their disposition toward learning. Without all three of these components, the approach would seem to fall within the constraints of traditional classroom instruction... or motivationally guided personal exploration” (p. 597). The transformative teacher models explicit transparency in thinking about learning-related beliefs, values, and assumptions to such a degree that students learn to transform their own inner processes.

This study intends to explain the *process* of how teachers transform the limiting learning-related worldviews of students as a result of exchanges within the classroom or school environment, *as it is already happening*. The purpose of the study is to understand what the process itself looks like within the SFUSD public school system, to understand how it works, and what the prerequisite variables are for transformation to take place in the classroom.

Anonymously nominate participants at:

<https://www.surveymonkey.com/r/NominateSFUSDTeacher>

Contact, Holly Adler, MA, PhDc: [withheld for privacy] / [withheld for privacy]

Holly is currently an RSP with SFUSD. She is conducting this study in partial fulfillment of the requirements for the degree of Doctor of Philosophy in East-West Psychologies, as a student at California Institute of Integral Studies, San Francisco, California

**APPENDIX C: EXECUTIVE SUMMARY OF RESEARCH PROPOSAL
FOR RECRUITING**

This qualitative study aims to explore the teacher-student exchange in the classroom environment as a transformation point in a systems panarchy, including social, psychological, ecological, and economic systems. This proposed research hopes to expand the education of both teachers and students toward becoming critically reflective socially, ecologically, and economically conscious, self-transforming citizens of inter-connected local and global communities.

In effort to develop an empirical model that addresses the need for cultivating healthy worldviews related to learning, self-development, and cross cultural communication, this study will investigate how classroom teachers model positive transformations in worldview during their everyday instruction and classroom management for adolescent students. Hypothetically, classroom teachers must already be fostering worldview transformation in their adolescent students to at least some degree. This specific aspect of the teacher-student relationship in transformative education appears to be some sort of leverage point in the learning dynamic, or transformation points in the environment as situated in classroom, school, and social systems. This research will develop a mid-range grounded theory that paints a picture of how teachers model a worldview transformation process, through exchanges with their students, which fosters consciously transformative mindsets. SFUSD credentialed employees will nominate (up to 36) credentialed colleagues, with various types and levels of experience, that are believed to be successful in transforming limiting learning-

related worldviews held by their adolescent students. Participants will be interviewed about the processes they facilitate in the classroom and school environment that cultivate self-efficacious learning-related worldviews in adolescent students.

This proposed research is situated within the context of three overarching paradigms: systems complexity theory, social construction theory, and critical theory. Systems complexity theories aim to understand the panarchy of systems in which life exists and perpetuates, and is the primary paradigm from which the research is approached methodologically. Social construction aides in understanding how individuals that are living within these systems are psychologically constructing self-referential meaning making systems (worldviews) based on their experiences. Critical social theories support the conjoining of systems complexity theories and construction theories to locate the processes of transformation in education that free individuals from the limitations of the system and their own self-limiting constructs based on their own knowledge and experiences of that system. To develop this 3-part lens, the transpersonal psychology approach was utilized to look at how individuals reach beyond the structure of their own self-referential meaning making system to integrate new information presented in the learning exchange, thus transcending themselves and removing limitations in their own worldview.

Contact, Holly Adler, MA, PhDc: [withheld for privacy] / [withheld for privacy]

Holly is currently an RSP with SFUSD. She is conducting this study in partial fulfillment of the requirements for the degree of Doctor of Philosophy in East-West Psychologies, as a student at

California Institute of Integral Studies, San Francisco, California

APPENDIX D: OPERATIONAL DEFINITION OF WORLDVIEW

Transformative teaching is a field that addresses the challenges classroom teachers face in the cultivation of students' self-efficacious learning-related worldviews (Slavich & Zimbardo, 2012).

Villegas and Lucas (2002) explain that worldview is not a universal construct, but socially constructed and “profoundly shaped” (p. 27) by each individual's life experience, affected by a variety of influences. Therefore, each individual's worldview is a unique, yet flexible position on a global continuum of perspectives and perceptions; an interconnected web affected by culture, geographic position, socio-economics, health, belief systems, philosophies, guardianship, somatic phenomena, education, developmental level, and states of consciousness, as well as many other factors. Each individual's distinctive positionality and perspective is relative to, affected by, and in relationship with what other individuals perceive as their own positionality within the interconnected web that makes up the global system of all individuals and their worldview. A worldview can be interpreted as a blueprint or the structure an individual references to make meaning from experiences (Naugle, 2002). This can be imagined like a homebuilder that uses modular designs—many houses in the same community can have identical components because they used sections of the same blueprints combined to make a unique floor plan. Awareness of this structure makes it possible to compare one's blueprint or worldview to another set or organization. Kreber (2012) clarified that critical theory, critical reflection, and social constructionism inherently link through processes of evaluating broad

ideological canons, or commonly held worldviews, which can be socially constructed and unconsciously accepted. These unconsciously accepted worldviews become operating modalities that affect personality development and character. Wade's (1996) work shows that some components of worldview are variables to state of consciousness, such as concepts of time, ability to foresee cause and effect, understanding of power dynamics, and beliefs about relationships with others.

Lincoln and Guba (2013) explain that a worldview is a socially constructed interface that mediates between reality, the individual's experience of reality, and the individual's understanding of what their reality actually is. This interfacing capacity aids the individual in making meaning and understanding how they have made meaning out of all the many bits of information that came together to form a worldview from the experience of their reality. Worldview encompasses self-view, and the two concepts reflexively affect each other: as one changes so inextricably does the other because the relationship between the individual self and the outside world has shifted, although in some cases the shift may be subconscious (Schlitz et al., 2008; Schlitz et al., 2010). An understanding of one's own self-view and worldview develops reflexively through critical self-reflection (Villegas & Lucas, 2002).

APPENDIX E: IMAGE OF ONLINE FORM FOR COLLECTING NOMINATIONS

<https://www.surveymonkey.com/r/NominateSFUSDTeacher>

Nominate Exemplary SFUSD Transformative Teachers

Thank You For Your Nominations.

We all want to know: What is that teacher doing so well it is making students transform right before our eyes?

Anonymously nominate SFUSD transformative teachers to participate in a research study. This includes classroom teachers, special education teachers, literacy /intervention specialists, principals, or coaches (credentialed) whom you believe to fulfill the following criteria:

A transformative teacher is skilled in fostering worldview transformation in their students. Worldview transformation is defined by Schlitz, Vieten and Amorok, (2010) as:

"A fundamental shift in perspective that results in long-lasting changes in people's sense of self, perception of relationship to the world around them, and way of being...transformation involves epistemological changes in how they know what they know. It is not only behaviour that changes, but also the motivational substrate from which that behaviour arises. It is not only a change in what people do, but also in who they understand themselves to be." (p. 20)

Slavich and Zimbardo (2012) defined transformational teaching as having the expressed or unexpressed goal to "enhance students' mastery of course concepts, their learning-related skills, and their disposition toward learning. Without all three of these components, the approach would seem to fall within the constraints of traditional classroom instruction... or motivationally guided personal exploration" (p. 597). The transformative teacher models explicit transparency in thinking about learning-related beliefs, values, and assumptions to such a degree that students learn to transform their own inner processes.

This study intends to explain the process of how teachers transform the limiting learning-related worldviews of students as a result of exchanges within the classroom or school environment, as it is already happening. The purpose of the study is to understand what the process itself looks like within the SFUSD public school system, to understand how it works, and what the prerequisite variables are for transformation to take place in the classroom.

Thank you for taking the time to nominate your colleagues. Your support in this way is greatly appreciated.

1. Name of individual being nominated:

2. SFUSD School in which nominee is employed:

3. Position or Age/Grade level:

4. Email, Phone, or Contact information for nominated transformative teacher:

5. Optional: Reason you identify the nominee as meeting the criterion for being a Transformative Teacher:

Contact, Holly Adler, MA, PhD: adlerh@sfusd.edu / digitalresourceress@gmail.com

Holly is currently an RSP with SFUSD. She is conducting this study in partial fulfillment of the requirements for the degree of Doctor of Philosophy in East-West Psychologies, as a student at California Institute of Integral Studies, San Francisco.

APPENDIX F: SAMPLE INITIAL CONTACT COMMUNICATION

Dear (Name of Nominee),

Your colleagues participated in a survey looking for teachers within the San Francisco Unified School District whom they believe are transformative teachers. Your colleagues have identified you as an exemplary transformative teacher, and I am requesting that you consider participating in my research study. This research is being conducted in partial fulfillment of my requirements toward the degree of Doctor of Philosophy in East-West Psychologies at California Institute of Integral Studies. I am currently an RSP at Marshall Elementary School, and this study has been approved by the research and accountability department of SFUSD.

In effort to develop an empirical model that addresses the need for cultivating healthy worldviews related to learning, self-development, and cross cultural communication, this study will investigate how exemplary transformative teachers model positive shifts in worldview during their everyday instruction and classroom management for adolescent students, resulting in lasting transformations in their adolescent students. Nominated teachers and credentialed employees in the San Francisco Unified School District will be interviewed about the processes they facilitate in the classroom that cultivates self-efficacious learning-related worldviews in adolescent students. Your participation in this study can remain entirely anonymous, if you so wish.

Thank you for taking the time to consider participation in my research project. Please feel free to be in touch with any questions or to have a

conversation about the project. I look forward to hearing from you. I sincerely value your expertise and hope that you will be willing to participate. If I do not hear from you, I will follow up in a week to ten days.

Sincerely,

Holly Adler
347.809.XXXX
[withheld for privacy] / [withheld for privacy]

APPENDIX G: INFORMED CONSENT FORM

To: Research Study Participant
From: Holly Adler, Researcher
California Institute of Integral Studies

Dear Participant,

You are invited to take part in a study on the experiences of adolescent classroom teachers regarding worldview transformation in their students, on both the individual and group level. This study is part of the researcher's dissertation to obtain a Ph.D. from California Institute of Integral Studies. Your voluntary participation will support scientific research in better understanding adolescent transformative education. This research has the potential to lead you to insights about your own experience by promoting self-reflection, and may also benefit anyone working with adolescents now and in the future. Participants will be asked questions about their teaching practice and what they believe has fostered lasting transformations in their students. As a teacher, the researcher acknowledges with gratitude the wisdom and skill all participants have earned through their teaching experiences. Thus, all participants are considered co-researchers, because without your help this study would not be possible. Participants are considered experts on the topic of the research and accurately portraying their knowledge is essential to successful completion of this research project.

Your participation will include 1 primary interview, scheduled at your convenience, which will last no more than 1.5 hours, including time for taking notes or pictures of relevant classroom content (such as posters, charts, student work or scores, and other relevant materials). Any materials the participant deems

to be relevant to the research as data may be photographed or electronically recorded with identifying markers removed. A follow up communication by email will take place after data analysis to clarify or expand upon in significant areas of inquiry, if needed. A second interview may be requested to further discuss emerging concepts that arise during data analysis and subsequent interviews with other participants. The interviews will take place at a time and place that is mutually convenient and agreeable, during or after school. If appropriate, the interview will be conducted in your classroom. The interview will be audio-recorded and transcribed personally by the researcher. If applicable, the researcher may visit the participants' classroom at a later date to make observations during the academic day. Observations will be focused on the processes and dynamics discussed in the interviews, or to clarify ideas through understanding the lived experience. No visual recordings will be made during observations. Interested participants will be offered an opportunity review sections of the data analysis as part of the member check, to ensure accuracy between the participant's experience and the researcher's interpretation.

The confidentiality of recordings, transcriptions, and all data are guaranteed. The contents of the interview are data, and may appear verbatim in the final report of this research (with identifying markers removed). All participant identities will be concealed. You may provide a pseudonym for yourself at the end of this document. If you do not do so, one will be provided for you. Participant's identity will remain anonymous on all materials and in future publications.

The researcher is not aware of any potential harm involved in participating in this study, but talking about your experience may bring up uncomfortable memories or feelings. The researcher can and will refer you to professional help if you feel it would be useful to healthfully manage such discomfort. If you have any questions or concerns, or need additional information at any time during or after this process, please do not hesitate to contact me.

All the electronic information gleaned from this research will be stored in a private password-protected hard drive. Any tangible documents will be stored in a locked cabinet inside the researcher's home, will not be shared with anyone, and will be destroyed after the research is completed.

Your privacy is important. Please feel comfortable asking any questions that might come up before, during, or after your participation in this study. If you decide to be a part of this research, you reserve the right to withdraw from the study at any point without penalty or perjury. You may request a summary of the findings or the complete final report in the form of a dissertation. The dissertation will be published through ProQuest. A journal article may be derived from the dissertation and published in an academic peer-reviewed journal. The dissertation may be published in book form or other popular formats as a way to share the results of the study. If research is concluded in order to fit within a reasonable time frame for completing a dissertation, the researcher may re-submit for an additional ethics review board approval and continue the project until full completion of a grounded theory is developed. The researcher retains the rights to the resultant publications of the project.

In addition, should you at any time wish to discuss issues related to your contribution to this study, including questions regarding your rights as a participant, suggestions for how to minimize potential risk, or concerns that you have been put at risk, you may share your concerns (anonymously, if you wish) with the Human Research Review Committee at the California Institute of Integral Studies 1453 Mission Street, San Francisco, CA 94103 by phone (415) 575-6100 or e-mail hrrcoffice@ciis.edu.

Participant Bill of Rights

You have the right to...

- be treated with dignity and respect;
- be given a clear description of the purpose of the study and what is expected of you as a participant;
- be told of any benefits or risks to you that can be expected from participating in the study;
- know the research psychologist's training and experience;
- ask any questions you may have about the study;
- decide to participate or not without any pressure from the researcher or his or her assistants;
- have your privacy protected within the limits of the law;
- refuse to answer any research question, refuse to participate in any part of the study, or withdraw
- from the study at any time without any negative effects to you;

- be given a description of the overall results of the study upon request.
- discuss any concerns or file a complaint about the study with the Human Research Review Committee, California Institute of Integral Studies, 1453 Mission Street, San Francisco, CA 94103.

I have read and understood this form, that the researcher has explained the study to me clearly, and that she has answered my questions about this research project to my satisfaction. My participation in this research is entirely voluntary and my signature indicates my willingness to be a participant in this research.

Choose pseudonym, or one will be chosen for you

_____	_____	_____	_____
Participant's Signature	Date	Researcher's Signature	Date

Contact Information (Please Print):

Name: _____ Phone: _____

Address: _____ Email: _____

Researcher: Holly Adler, RSP, MA, PhDc
 Email: [withheld for privacy] or [withheld for privacy]
 Phone: 347.809.xxxx

APPENDIX H: CONFIDENTIALITY AGREEMENT

Title of Research Project: A grounded theory study on teachers' experience with worldview transformation in their adolescent students.

Principal Investigator: Holly Adler, RSP, MA, PhD

As a participant and member of this research team I understand that I may have access to confidential information about study sites and participants. By signing this statement, I am indicating my understanding of my responsibilities to maintain confidentiality and agree to the following:

- I understand that names and any other identifying information about study sites and participants are completely confidential.
- I agree not to divulge, publish, or otherwise make known to unauthorized persons or to the public any information obtained in the course of this research project that could identify the persons who participated in the study.
- I understand that all information about study sites or participants obtained or accessed by me in the course of my participation is confidential. I agree not to divulge or otherwise make known to unauthorized persons any of this information, unless specifically authorized to do so by approved protocol or by the principal investigator acting in response to applicable law or court order, or public health or clinical need.
- I understand that I am not to read information about study sites or participants, or any other confidential documents, nor ask questions of

study participants for my own personal information but only to the extent and for the purpose of participation in this research project.

- I agree to notify the principal investigator immediately should I become aware of an actual breach of confidentiality or a situation which could potentially result in a breach, whether this be on my part or on the part of another person.

_____ Signature	_____ Date	_____ Printed name
_____ Signature of principal investigator	_____ Date	_____ Printed name

APPENDIX I: SEMISTRUCTURED INTERVIEW PROTOCOL

- I. Arrival, Introductions, Appreciations, Remaining questions.
- II. Review and sign the Informed Consent, Bill of Rights, and Confidentiality Agreement.
- III. Begin the audio recording.
- IV. Preliminary questions:
 - a. Did you have an opportunity to review the materials? - recruiting flyer, executive summary, operational definition of worldview in relationship to transformative teaching - if not, review materials
 - b. So, tell me about your teaching experiences and academic history
 - i. prompts:
 1. Years teaching
 2. Types of teaching experience
 3. Type of credential
 4. Level/type of education
 5. Previous/other careers
 - c. How do you see your worldview as uniquely impacting your teaching practice? (prompt: teaching philosophy)
 - i. What is the most valuable thing that you think you bring to the classroom as a teacher?
 - d. Are you familiar with the term positionality, or social positionality?
 - i. Depending on if they know:
 1. Could you explain what this means to you?
 2. Okay, so, how would you describe yourself as a citizen or member of society? How would you describe your self in relationship socially to other people in the world?
- V. Semi-structured interview questions
 1. Do you approach your teaching with the intention of improving non-cognitive factors in student worldviews?
 - a. Do you see student worldviews as needing improvement?
 - b. In what ways?
 2. What do you do to teach students to learn about themselves as people and as students?
 3. Have you witnessed an “aha” moment, when all of the sudden the student seems to shift perspective and things just make sense in a new way?
 - a. Variables, situation, teachers role, dynamics

4. In what ways do you create a classroom learning environment that fosters exploration of worldviews—i.e., beliefs, values, attitudes, meaning, knowledge—and what ways do you bring in your own or the students worldviews?
 - a. “safe” (brave) space for vulnerability and taking risks
 - b. thinking about thinking
 - c. self-reflection (students and teacher)
 - d. reframing and redirecting student perspective and behaviors for improved understanding
 - e. problem solving thinking skills
5. What do you do to make apparent underlying structures of problems or situations that may not be clear from the students initial perspective, both in the classroom and related to academic subjects such as history, literature, or current events?
6. How do you foster participatory engagement that is conducive to learning in relationship to ones own learning and others?
 - a. growth-directed attitudes
 - b. resistance toward learning in the classroom
 - c. becoming happy / life-long learners
 - d. shifting motivation
 - e. see problems from multiple perspectives
 - f. hold multiple worldviews
 - g. emotional intelligence
 - h. social consciousness
 - i. power dynamics
 - j. critically analyzing their own and others perspectives
7. Have you ever done something (and what was it), and seen the students perspective change in any of these areas:
 - a. Views of themselves as learners.
 - b. Efficacy beliefs regarding perceived competence and intelligence.
 - c. Task-related values and emotions (like interest).
 - d. Goals for learning.
 - e. Nurtures motivation to learn.
 - f. Beliefs about intelligence
 - g. Addresses beliefs about how students view themselves in relationship to the world outside of the classroom.
 - h. Goals for the future.
 - i. Roeser, Strobel, & Quihuis, (2002)
8. Adopted from the SFUSD (2015d) Standards-Based Report Card.

- a. How do you evaluate these social development and work-study habits standards?
 - b. How do you support students in meeting these standards?
 - i. Social Development and Work Habits
 - 1. consistently shows effort
 - 2. respects self and others
 - 3. listens attentively
 - 4. meaningfully participates in classroom activities and discussions
 - 5. follows directions
 - 6. completes tasks and assignments
 - 7. completes and returns homework
 - 8. demonstrates organizational skills
 - 9. works independently
9. Are there any aspects of the curriculum or school systems that support you in teaching in a way that would foster self-efficacious worldview transformation?
- a. Are there any aspects of the curriculum or school systems that prevent you from teaching in a way that would foster self-efficacious worldview transformation?
 - b. AKA what are the limitations or possibilities inherent in sfusd / your school.
10. How do you actively shape and create shifts in the way students are engaging with learning or releasing whatever is blocking them from actively participating in (taking ownership over) their own learning?
11. I want to hear your real opinion about what is working and what isn't - with moving students from a limiting perspective of their learning to a perspective that is more like a growth mindset.

APPENDIX K: PHOTO OF INTERVIEWS WITH CODES/NOTES

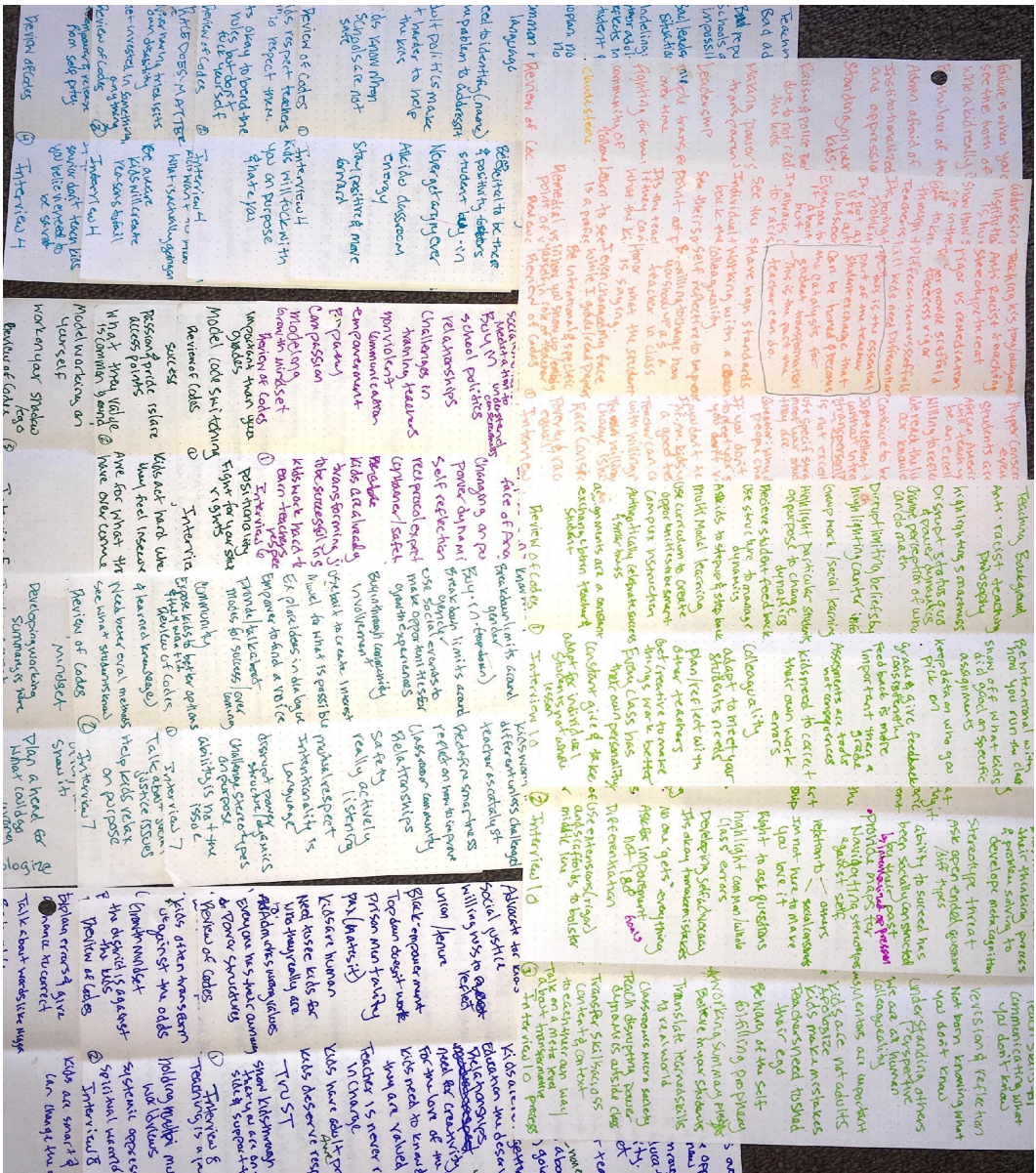
Exploring this idea of what makes a person smart. And so I started seeing them videos or like *highlight* this study from this woman Joao Bowler, from Stanford a researcher who is researching *different ways* mathematical abilities in kids and so she says that you can still develop and grow your brain and learn no matter what age you are. You can learn new abilities. You just have to put that *of being smart* effort in and practice and make those connections so that the neurons can connect and then we make those neural pathways it. And then we really solidify those and create really those pathways and so. And I also give them my story as an example because I first went into college community college I scored at the lowest math course and the lowest English course. From that being exposed and not doing math a million times? I decided in college that I liked helping people with it. And there's also a lot of misconception that a lot of people have, then people who do math our computers like they compute really quick, and that's... H that math thinking is not creative or N and so there's also a distinction between fingers like a Diaz and that's how they get in the math an even higher math because of ideas, the conceptual, and the computational part. My family is always like how can you be a math teacher if you can't compute really fast and it's like that's not it. And the reality is some people have a slower processor than others and doesn't make them any less smart or intellectually able. It's just for some takes more time and that's okay *abilities smarter* because actually people who can process slower can say to the other students in a group who are processed process things really quick, and be like O didn't we forget to do this and then we can be like oh yeah that was my mistake because I went too fast through it. And so there's many ways that people can benefit from each other in the classroom and is the teacher's job to be able to give that confidence in that group confidence to the students. How can the teacher bill that confidence in the group, that it's okay to make mistakes. *It's the teachers job to build confidence* N like the vulnerability yes the vulnerability it's a growth mindset if the vulnerability it's making it okay and actually praising the mistakes because now we have the opportunity to learn from that and because everybody tends to make this mistake and then actually explaining the mistake is a beautiful thing to see. I give my students points for speaking math for presenting the math and talking about their math. And even when they're presenting they may not see the mistake but then we open it up to discussion with the class. Or sometimes once the students finish all comment I say love this we did this here and I'll say and you know what this is a great opportunity I'm so glad the student did this because look a lot of us 10 to make this mistake. And some of you Arnie made that and that's great because this is connected with an opportunity to Interview 18 *Activity discuss learning from errors*

tackle this mistake and really make sure we all learn and watch out for it. And how can we fix this right now? And we get input from the classroom. H oh so it's like we can talk about like attacking it for multiple dirt directions and perspectives N yes and that's a Job bowler talks about a growth mindset is that we might all be looking at the same thing by how we capture it in our minds and how we process it. It's very different. And so she has a video on her website where she's teaching these, she shows a set of, she shows an image to these girls at summer camp for math. And it's just dots and she gives them a few seconds to see this, she told before that she says something along with I want you to count the dots in this image and just can assure you really quickly so you're going to have to capture the whole thing like the image you can have to just remember it. So she tells them that and she shows them image and the students then, so then she asked how many dots and most of them said seven. And or something like that. And she said while we all know we all capture this image in a different way. And so I know that we all see it differently and so I each of you to explain to me how you saw it. And then each kids said like oh I saw this and I saw this. And this other way and it was a different pattern, and then there's another girl and she saw a different pattern. So I showed this to my class and it's amazing that we understand that we could all of the same thing but have a different perspective and we could all gain some understanding or different perspectives and the more different perspectives we have about looking at the same thing then the more abilities you have and the more agile you are. The more flexible you are. To understanding certain things. And growth mindset goes the different areas of like being vulnerable: putting yourself out there, making it okay to not know. Because a lot of these students have this idea that they should be born with knowing. I and they think they know everything N yes because they have so much pride in knowing something that they don't want to feel dumb and so the teacher, it's my job as a teacher to make a safe space on the learning because then once you do that you have to deal less behavioral issues because everybody is able to learn. And I think that's what it's about engaging, and like when a person feels like it's okay to not know and they're below more willing to assay how did you get that or I don't understand that. And then they're more ready to do the work with their group because they have a support in their group does a teacher you deal less with behavioral issues of like pay be quiet are hey get back to work. And if they felt safe in their group they wouldn't need to dance on their chair and avoid the work. So Interview 18 *Social /community learning*

definitely, and these are structures within the classroom, is group work is important. So complex instruction is very important. But, a lot of people think you have to follow everything that thing that they teach you in CI right? But people need to recognize that this is just any other formula. You know, there's different things you can plug into it. You can do it with different organization, and a different way of doing it. For example I have found that it is very important to remove that title of the team captain. For example and see I they do roles. But I do roles but I removed that the team captain. So for example the reason why we disguised removed status amongst them kids in the group right? But then you have to lose status all the way and get rid of the group Capt. There's so many different things you do to remove status it first of all, Capt. is a very like, and I just have three roles right now, and I just introduced a timekeeper to have an easy role to deal with. I removed the captain because it just didn't seem right. H did you have kids that hate ci and group work? N I haven't got push back I think because in their previous schools they have been exposed to it and they accept that this is how it goes. But before, when we first introduced it we got so much push back, not only from students who didn't care for math or didn't like math or weren't math people, cause that's how they labeled themselves, especially from the high students because they didn't want to work with the low kids. And it's great that the math classrooms are teaching them to learn how to work with different type of people. *is forcing kids to start looking at how to best work together, and stop saying I'm not gonna work with that person because that person is dumb.* It is gently removing the stereotypes, and the I don't want to look stupid, or I don't want to want to work with that student that doesn't do any work, well why don't they do any work? Because they don't have the confidence, so the high kids feel like they have to teach all of the time. There was a lot of pushback, now not so much. I haven't seen that very much. Another thing that goes along with complex instruction, but in the PD's when they are teaching about CI this doesn't get introduced and I feel I missed out that it doesn't get introduced formally, and it's this idea of growth mindset. The growth mindset thing is very very important. It has become a very important role in my teaching. It is when I am teaching it is teaching my students how to have a growth mindset. H how to use than how you do that? N I try to get my students from the beginning, and prep them right when I first get my students. tried alike, okay we all know that the feel a certain way about math. And so we start talking about it and they say like I feel bad I feel stupid I'm just not a math person or I hate math. See you gather all this information in writing on the board, and you expose them to what's going on inside all of them. And then you talk about it with science and talk about people who are Interview 18 *Defensive about success looks like*

growth mindset I'm beginning to them in this fourth year. Enim done growth mindset lessons here and there, but I'm getting to feel more white into it because I can also reflect on my life, on my process, and on how I've grown, and on I continue to develop even now. That's the wonderful thing about growth mindset. The philosophy behind it. You will never stop learning unless you want to. So I'm beginning to be more into it because it better if students more buy in and I have the deal less with behavior. They feel a little bit more confident. H are there any other things that you think really contribute to creating the environment that's working better versus what was before? N while complex instruction, but modify it to what your style is you really have to put something into that, what is best works, growth mindset, having the room to play with math, you have to allow that for your students to be able to play, period and allow yourself as a teacher to play. With the math to because if you don't allow yourself to play and see, that you don't have all the answers that it makes math a little bit more human. And finally I think making it real-world, that's what I mean by playing with that like having some room to explore math. In making connections to their cultural background, that's something that I can because I was in transition right now into this new school it's been a little bit tough to get a round that kind of thing right now, but I've done in the past that it and I really want to do it again because I was new and now I want to do it like our new levels and play with the ideas of how to get more their culture mathematical intake, there ancestors math, included a little bit more and then because I think that's important. Because I felt inspired through the math of other cultures. And it's important to have them understand that math is not European, math is, math did not come from the Greeks. I mean maybe they published more because an Libraries, but Mayans and Aztecs had libraries too. But allowed on a lot of people know that either. H and that's the West and dominant Eurocentric paradigm? N and you have these books that are kept in Spain. And it's important to get exposed and feel more connected to your roots because it allows you to say, okay, yeah I have some value everybody does, not just certain people. I feel it getting kids connected to their roots, their cultural map, and think that's important. I'm also going to try and go for my Masters and I'm going to try and do it more of like, on the cultural perspective of the math of different cultures. H culturally sensitive math. You know, we want to go yet? N so there's a big publishing of Samoan students and I would like to explore a little bit more of their math as I've never been exposed to it so out of it to go to Somalia and try to see what kind of staff they do over there and I want to go to other parts of other cultures that I have, so I can get like a real sense of what's going on. And it's also stimulating for me as a mathematician like how Interview 18 *Real world context, value*

APPENDIX L: PHOTO OF CODE SHEETS



APPENDIX M: PHOTOS OF COLLAPSING CODES SHEETS

Uphill battle all year ^{at the end you're tired}
 471519

Teaching is ^{an act of creativity} → need it: ^{visceral connection to life} ^{learning}
 581319 202123242526282929
 Give an experience & then talk a bout it
 Literally show them the world
 Intellectual
 Experiencial Learning
 Exposed to real life
 Create a way to relieve isolation

Showing value for teachers mirrors value for kids
 5242529 support →

Subtle changes ^{can happen in a very detailed day to day work}
 591528 * Beginning of year highly adaptable

Good classroom systems ^{structure to find the answer} ^{planning instruction} ^{good ins} ^{class positive structure as management to give voice to all}
 5101216171819242627282930 remove obstacles to learning

Critical thinking ^{teach kids not to believe everything they are told}
 58101320 look at world critically

Not really teaching is social injustice → ^{district/schools are underserving the kids}
 587101215162021
 result of ^{illiteracy is oppression} ^{conscious bias} ^{no integrity} ^{It's our job to engage them} ^{Sometimes}
 most kids not understanding means it's the teacher

Back up thinking with evidence

Communication → ^{Non violent communication} ^{improves peer dynamics}
 561012131428 skills for explaining what you don't know

Code switching (is social justice) ^{talk in a way they can understand}
 5781216172224 ^{teacher's unique!} ^{silence}

Classroom container ^{clean} → ^{boost not blast} ^{space to be themselves (safety/community)}
 567101112151617181921
 22252627282930 ^{create structure by class norms} ^{fill its natural step by step} ^{inside class ≠ outside class} ^{circle}

Stop teaching white dominated literacy ^{Breakdown stereotypes through} ^{Danger of a curriculum}
 5716202226 ^{single story} ^{teach more transpersonally}

White trash complex → ^{white fragility vs poverty complex}
 5916 ^{It's race not poverty}

Goals → ^{different for each kid} → ^{like literacy} ^{Plan for graduation} → ^{what's your dream}
 51016202829

Passions/pride are access points (see pg. 1)

Kids need to hear you are proud of them ^{for being vulnerable} ^{celebrate small success}
 58121516182024 ^(positive reinforcement) ^{that they are better than they think}

Have awe for what they have overcome ^{their lives aren't like ours}
 548101112141618192223242626 ^{honor their lives} ^{kids are in pain}

Relationships (types / family / mutual / earned / Intellectual ↔ Bonding)
 1 2 3 4 5 7 8 10 11 13 14 15 16 17 19 21 22 23
 24 25 26 27 28 29 30
 Community peer stakeholders
 no relationship = no academics

Family involvement 3

Smartness - value for each persons unique **redefining smartness**
 1 3 5 7 8 9 10 11 12 13 14 16 17 18 19 20 23 26 27 30
 see kids as intellectuals
 celebrate & artifacts
 Intellectual vs skills vs mental agility

Social Learning / Explore ideas in dialogue / process as conversation
 1 2 3 5 7 8 10 11 13 16 19 22 24 29 30
 Social confidence
 pros are motivating
 Kids like peers like them

Values as for helping people / world view
 1 2 5 6 12 14 15 16 19
 21 22 23 24 25 27
 for the kid sake
 teaching as politics
 wounded healer
 Teach to have big impact
 Teacher as activist
 Giving back to balance privilege
 Value for humanness through willingness to change to improve

Learn through unsolvable problems / dialogue talk about process of finding answer
 1 9 10 13 15 21 24 30
 walking the talk is the hardest part
 what's changed how to do it better
 Student work as model
 Do it to teach & do it to learn

Modeling - behavior / types of modeling / working on self
 1 3 4 5 6 7 8 9
 10 11 12 13 14 15 16 17 18 19 20
 21 22 23 24 26 27 28 29 30
 making models of thinking
 Student work as model
 Do it to teach & do it to learn
 Practice what you preach
 problem solving / self regulate
 micro to macro
 scripts for communicating
 application of content
 Trauma → crack a addicted kids
 adapt curriculum to kids strength

Content knowledge / Curriculum expertise
 1 4 5 9 10 11 16 19 21 24
 Depth expertise
 Content changes then use relevant & keep meaningful
 Content knowledge

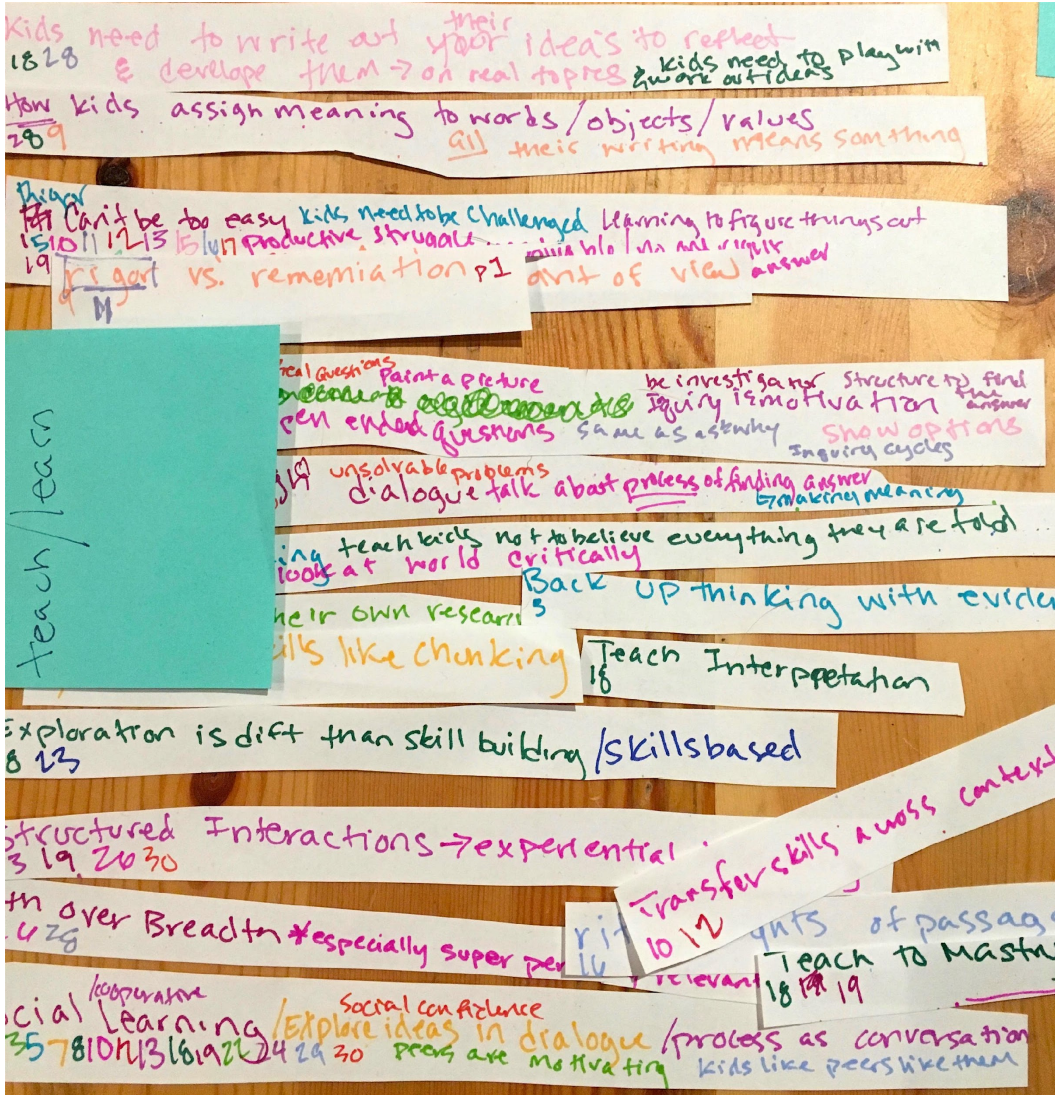
Social justice → **pros & means equity**
 1 3 4 5 7 8 10 11 12 13 14 15 16 19 21 22 23 27 28 30
 Systemic oppression
 teach how to confront / resist
 Teachers are the missing link

Project based → learn through experience real world
 2 3 12 18 19 20 22 23
 24 26 27 28
 DIT model → core elements → integrated / thematic / interdisciplinary
 → peer led
 develop systems thinking
 hands on
 Do it by instead of knowing

Social promotion / grades / credits
 2 10 11 12 14 15 18 19 20
 21 23 26 27
 Kids need to know that they know
 are the result of process
 Socially divide
 failing tests
 emphasizes importance
 Academics are primary
 → give grades / feedback consistently
 → assessments aren't consequences

Dealing w negative behavior / Resistance → resistance to change
 2 3 6 7 9 11 21 25
 kids who slip through the cracks
 Individual teachers resist most
 Internalized vs externalized toughness

APPENDIX N: PHOTO OF DEVELOPING CATEGORIES



Relationship Building

Relationships 12 23 25 28 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Family involvement 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Keep issues between teacher and student 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Connection (smaller classes) 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Honesty / Don't lie 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Honest 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

It's okay to take a minute 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

ack, they will get yours 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

al Invite kid to be real / talk about real life 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Listen: respect 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Don't interfere w/ how they constructed meaning 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

ALL Student feedback 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Perceive 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Let students teach you 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Living Negotiation / Agreements 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Communication 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Community / teaching dynamics 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Be excited & positive to create 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

enthusiasm 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

get tough kids bought in first 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

