TEACHING FOR SOCIAL JUSTICE: PALPATING THE

TENSIONS BETWEEN A ROYAL AND

MINOR SCIENCE

by

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DISSERTATION ABSTRACT

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In this study, I develop a formative assessment designed to provide feedback on the use of research supported and locally valued social justice teaching practices. This assessment can provide teacher educators a tool for providing feedback to in-service and pre-service educators to support their motivation for engaging in social justice teaching practices. However, calcifying social justice as a set of discrete practices comes at the expense of other possibilities and, ultimately, at the expense of realizing educations true liberatory potential. In order to attend to these philosophical limitations, I simultaneously map the assessment development project onto the argumentation Deleuze and Guattari use to address the metaphysical presuppositions that differentiate a *royal* and *minor science*. I argue that it is only by attending to both these royal and minor tendencies inherent to the development of the Teaching for Social Justice Formative Assessment that we are able to move away from systemic inequities and realize educations' liberatory potential.

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To Oren and Gilia, may you be part of a more equitable future.

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INTRODUCTON

A student walks into a clean and colorfully decorated classroom. Hanging on the front wall are pictures of the U.S. Founding Fathers and a copy of the U.S. Declaration of Independence. On the side walls are exemplary student work celebrating the best of the class; only a few of the 30 students earning such recognition. The desks are arranged facing forwards in neat rows with wide aisles as to focus the students' attention front-and-center and discourage side conversations during lessons. The student opens their[1] textbook to find repetition in who is present in both the pictures and the text; white, heterosexual, cisgender, able-bodied, middle-to-upper class males with a disproportionately small number of white, heterosexual, cisgender, able-bodied, middle-to-upper class females. Absent is any depiction of difference, let alone thoughtful interrogation of the underpinning conception of knowledge tacitly at work through the text to the privilege of some and to the detriment of others. The teacher begins the lesson, standing in the front of the classroom and directing the students through their exercises; the teacher functioning as the arbiter of knowledge, the student as a passive vessel to be filled. The student responds to the teacher's prompts, both verbal and written, and the teacher assess the student's grasp of the material. Correct answers are rewarded with both positive affirmation and good grades, exceptionality with public recognition. Incomplete or inadequate responses are met with redirection, reteaching, increasingly punitive responses, and poor marks – marks that play a significant role in defining the student's future.

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[1] Throughout this manuscript, I use "they" as a singular pronoun in acknowledgement that gender is non-binary and against the patriarchal usage of the masculine "he" as the long-approved default (Foertsch & Gernsbacher, 1997).

Unfortunately, the above story is all too real for many students in schools (Gamoran, 2001; Apple, 2001; Giroux, 1983); decades of research has demonstrated that our educational intuitions continue to fail to meet the needs of the diverse students they serve (Tuck, 2012; Sadker & Sadker, 2010). We currently live in a society replete with inequity, where the opportunities available to some are systematically denied to others (Aguirre & Baker, 2008; Royce, 2015). Although education may not be primarily responsible, it has often been both complacent and, at times, an instrument for perpetuating this injustice (O'Day & Smith, 2016), as the above story illustrates. Rather than an inclusive space, schools continue to reinforce a dominate narrative of exclusivity through the learning environment (e.g. Darder, 1991), curriculum (e.g. Sleeter & Grant, 2011), and pedagogy (e.g. Mahony, 1988). Although the perpetuation of current inequitable social systems is of non-trivial consequence to everyone (Stiglitz, 2012), it is particularly damaging to students from groups that have been historically marginalized (Ladson-Billings, 2006), including individuals identified as racial and ethnic minorities, gender minorities, sexual minorities, differently-abled, and working class (Caviness, 2014). Despite this, education also has the potential to liberate, creating new possibilities and opportunities for those disenfranchised by current social systems (Anyon, 2014).

In response to this identified need to better serve diverse students and communities, a sizable and growing body of scholarship within the fields of teaching and teacher education has sought to identify and implement strategies that ameliorate these inequities (e.g. Carter & Welner, 2013; Adams & Bell, 2016) – a diffuse body of work that might be categorized under the broad umbrella term of social justice (Novak, 2000; North, 2006). Concurrent with this increased focus on social justice within the research

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sphere, there has been a tandem rise within teacher education to prepare educators to realize education's liberatory potential.

Despite the ubiquity of social justice in teaching and teacher education, or perhaps because of it, conceptual clarity remains a challenge within the field (Goldman & Cropanzano, 2015). Although social justice is often espoused as a foundational ideal, it often lacks the requisite specificity to clearly lead to purposive action (Sturtman, 1997). As a result, many of the current summative mechanisms used to assess pre-service and in-service educators purposefully do not aim to provide feedback regarding the implementation of equitable practices within the classroom (e.g. AACTE, 2014). Through current teacher and teacher candidate evaluation tools, the above example might be an exemplary illustration rather than cautionary tale.

Motivational Consequences in the Absence of Conceptual Clarity

The absence of a clear understanding of key attributes of teaching for social justice is of consequence to educators as they wrestle with the resultant uncertainty as to how to best realize social justice goals within their classroom (Cochran-Smith, 2004). Current work within motivation theory helps elucidate why, in the absence of clear ideals and objectives, pre-service and in-service teachers vary greatly in their motivation to enact social justice teaching practices (Howard, 2011). Although considerable work has been done exploring and operationalizing various theoretical and philosophical conceptions of social justice within teaching and teacher education (e.g. North, 2006; Novak, 2000; Hackman, 2005), less attention has been focused on exploring the underlying reasons why teachers may or may not seek to engage in specific equitable teaching practices; only a small handful of studies have explicitly sought to understand

variation in educators' propensity for engaging social justice by exploring underlying

motivational factors (e.g. Karunaratne & Koppel, 2016; Picower, 2011; McDonald,

2005). Although these studies provide insight, current scholarship exploring social justice

teaching through a motivational perspective have tended to only operationalize a general

theoretical model of motivation. Leveraging more precise frameworks for understanding

the various facets of motivation can help researchers and activists better engage the

underlying issues and suggest targeted interventions within teaching and teacher

education.

One particularly strong and empirically supported theoretical framework for

examining motivation is expectancy-value theory (Eccles & Wigfield, 2002; Wigfield &

Cambria, 2010). Expectancy-value theory is founded on the idea that an individual's

propensity for engaging in a task can be understood as the interrelation of two factors; 1)

the individual's perception of their likelihood to successfully engage in the task and 2)

the value the individual places on the task (Eccles, 1983). Other factors that influence an

individual's likelihood for engagement in a specific task are mediated through their

impact on either or both the individual's expectancies and/or their values.

Within expectancy-value theory, expectancies are defined as an individual's

perception of the likelihood that they will be able to successfully engage a specific task –

a personal performance prediction (Lawler & Suttle, 1973). Theoretically, it is closely

related to self-concept, or one's perception of their ability to reach one's goals, and self-

efficacy, or one's perception of their ability to perform within a specific domain such as

science or math (Bong & Skaalvik, 2003). However, expectancy relates directly to

specific tasks and, therefore, allows for a more granular examination of an individual's

engagement in specific practices and behaviors than either self-concept or self-efficacy (Pajares, 1996).

Similar to expectancies, values are operationalized as task specific rather than in reference general or domain specific values (Hulleman, Durik, Schweigert, & Harackiewicz, 2008). Values can theoretically be divided into four subcategories; 1) attainment value, 2) intrinsic value, 3) utility value, and 4) cost (Eccles, 1983). Attainment value relates to the value an individual places on a task derived from their identity or sense of self; the value a mathematician might place on solving a mathematical proof derived from their perception of themself as a mathematician. Intrinsic value relates to the value an individual places on task derived from their perception of their interest or enjoyment of the task, the value a musician might place on performing derived from their own enjoyment. Utility value relates to the value an individual places on a task derived from the perceived benefit of the task in achieving various goals or other tasks, the value a student might place on learning course material in service of achieving the goal of college graduation. Finally, costs represent the obstacles an individual perceives that undermine the value of the task, including opportunity costs, effort requirements, and possibility of negative outcomes (Wigfield & Cambria, 2010).

Expectancy-value theory helps elucidate how ambiguity regarding specific key attributes of teaching for social justice can affect teachers' motivation for enacting equitable practices in their classrooms. First, in the face of such uncertainty, educators are likely to experience a decreased sense of efficacy, as self-efficacy is task specific (Zimmerman, 2000) and such ambiguity leaves social justice a "moving target." Research

has shown that the absence of clear goals is associated with a declination in motivation (e.g. Elliot & Harackiewicz, 1994). Second, such ambiguity and the resultant abandonment of evaluations of social justice teaching practices undermines the perceived value of social justice teaching, as assessments are often a mechanism through which collective values are emphasized (Sternberg, 2009). Failing to provide feedback on the degree to which educators teach for social justice can also undermine the perceived utility value of equitable teaching practices; it can be difficult to connect the future benefits of specific social justice teaching practices so long as they are outside the purview of the assessments used and feedback teachers receive. In order to realize educations liberatory potential, it is necessary to address these underlying motivational issues and support teachers in enacting social justice teaching practices in their classrooms.

Assessing Social Justice

One possibility for increasing educators' motivation to teach for social justice is the implementation of a formative assessment that provides structured feedback. Formative assessments provide individuals "the power to oversee and steer one's own learning so that one can become a more committed, responsible and effective learner" (Black & Jones, 2006 p. 8). Research has found that structured, transparent feedback can lead to an increase in purposeful behavior (e.g. Bandura & Cervone, 1983). This need for structured feedback is one acknowledged within the field of teaching and teacher education (e.g. Cochran-Smith, Reagan, & Shakman, 2009) and, in response to this need, several assessments have been developed. Present assessments can generally be categorized as evaluations of teacher "dispositions" or evaluations of teacher practices.

Evaluating teacher dispositions. In an extensive review of the literature, Fietzer and Ponterotto (2015) identify only four available instruments for measuring social justice dispositions across academic disciplines that had published results for validity and reliability and meet the assessment development criteria outlined by the American Education Research Association, American Psychological Association, and National Council on Measurement in Education (2014). These instruments include a) the Activism Orientation Scale (Corning & Myers, 2002), b) the Social Issues Advocacy Scale (Nilsson et al., 2011), c) the Social Issues Questionnaire (Miller et al., 2009), and d) the Social Justice Scale (Torres-Harding, Siers, & Olson, 2012). Although each of these assessment instruments provides useful insight into various dimensions of social justice dispositions, there are two issues undermining the adoption of any of these extant measures within teacher education. First, as Fietzer and Ponterotto (2015) assert in their review, each assessment lacks, to varying degrees, adequate psychometric evidence of reliability, validity, and factor structure. Secondly, none of these instruments are specifically designed for use within the classroom.

Within education, several instruments have been developed that aim to evaluate teacher dispositions related to social justice. The Bogardus Social Distance Scale (BSDS, Bogardus, 1933), one of the first such instruments, was designed to capture an individual's feelings of acceptance or rejection for different racial and ethnic groups. Using a Guttman scale (Menzel, 1953), the BSDS asks people the extent to which they would be accepting of individuals from seven groups varying in closeness, ranging from relatives and in-laws to non-citizens.

The Cultural Diversity Awareness Inventory (CDAI, Henry, 1986) is a self-administered questionnaire designed to assist educators in examining biases in their attitudes, beliefs, and behaviors towards culturally diverse students. Building off previous work on cultural awareness (e.g. Aragon, 1973), the questionnaire examines biases against cultural diversity across five domains: 1) values, 2) communication styles, 3) social relationships, 4) basic diet, and 5) dress. The CDAI consists of 28, five-point Likert-type items on which educators evaluate the degree to which they agree or disagree with each prompt across each of the five domains. Since its development, the instrument has been used by several scholars to evaluate pre-service and in-service teachers' cultural sensitivity (e.g. Larke, 1990; Davis & Turner, 1993; Davis & Whitener, 1994).

The Cultural Awareness and Beliefs Inventory (CABI, Webb-Johnson & Carter, 2005) measures urban teachers' cultural awareness and beliefs towards African American students. The instrument includes 46 four-point Likert-type items across eight factors: 1) beliefs about African American students, 2) school climate for supporting the needs of African American students, 3) culturally responsive classroom management, 4) home and community supports, 5) cultural awareness, 6) curriculum and instruction, 7) cultural sensitivity, and 8) teacher efficacy. Follow-up studies have supported the internal consistency, reliability, and validity of the CABI (Natesan, Webb-Hasan, Carter, & Walter, 2011).

The Learning to Teach for Social Justice – Beliefs scale (LTSJ-B, Ludlow, Enterline, & Cochren-Smith, 2008) is a self-report survey that prompts pre-service and in-service teachers to rate 12 items about their beliefs and perspectives on teaching for social justice on a five-point Likert-type rating scale ranging from strongly disagree to

strongly agree (Ludlow et al., 2008). The LTSJ-B is designed to track changes in educators' social justice beliefs as they progress through their teacher education program and entry into the workforce (Ludlow, Enterline, & Cochren-Smith, 2008).

The Teacher Multicultural Attitude Survey (TMAS, Ponterotito, Baluch, Greig, & Rivera, 1998) is a unidimensional self-report assessment of educators' multicultural awareness and sensitivity. Using a five-point Likert-type scale, teachers are asked to identify the degree to which they agree or disagree with 20 items measuring general multicultural awareness, appreciation and tolerance. Factor analysis on two samples supports the internal consistency of a single global multicultural awareness factor.

Additional instruments have been referenced in empirical studies but have not been published in peer-reviewed journals. For example, the Survey of Multicultural Education Concepts (SMEC, Moore & Reeves-Kazelskis, 1992) is designed to evaluate teachers' beliefs and attitudes about multicultural education. The SMEC consists of 18 four-point Likert-type items that address students' familiarity and understanding of racism, sexism, stereotyping, linguistic views, special holidays, and educational practices. Several additional studies utilize subscales or individual items from larger instruments. In other studies, Tatto (1996) evaluated teachers' beliefs and values associated with teaching diverse students using a nine-question subscale of the Teacher Education and Learning to Teach assessment instrument, while Solomon and Levine-Rasky (1994) used the Professional Development subscale from a large multi-jurisdictional study of in-service teachers to evaluate their perspectives on multicultural and antiracist policies. Finally, Haberman and Post (1990) analyzed teacher response to a single prompt using Sleeter

and Grant's (1998) framework for considering issues around race, color and gender to evaluate educators' perspectives regarding the goal of multicultural education.

Evaluating teacher practices. Whereas assessments of teacher dispositions towards social justice evaluate an individual's beliefs and attitudes, evaluations of teacher practices aim to capture how educators realize these ideals within their classrooms. Although there are numerous instruments, subscales, and items designed to capture teacher dispositions towards social justice in education, there are significantly fewer instruments for evaluating teacher practices associated with social justice (Grant & Agosto, 2008).

The Teaching for Social Justice Observational Scale (TSJOS) of the Reformed Teaching Observation Protocol-Plus (Mitescu, Pedulla, Cannady, Cochran-Smith, & Jong, 2011) includes 14 items on an observational scale operationalizing Cochran-Smith's (2010) framework for educating for social justice. The TSJO utilizes eight items from the original Reformed Teaching Observational Protocol (Piburn & Sawada, 2000) related to multicultural education and diversity, plus six additional items capturing additional aspects of teaching for social justice. All items are rated on a five-point scale as to the frequency of observable behaviors in the classroom, from never occurred (zero) to 4 (pervasive). Factor analysis of the TSJOS determines a single global social justice teaching factor and the instrument has demonstrated high internal consistency (Mitescu et al., 2011).

The Teaching for Social Justice category of the Revise Inquiry Project Pre-service Teacher Assessment at Boston College (RIPA-TSJ, Barnatt, 2008) is a multidimensional assessment that examines social justice teaching across five major criteria: 1) examining

personal values, biases, and beliefs, 2) understanding the contexts of schools, 3) affirming diversity as an asset, 4) creating a caring and just classroom environment, and 5) acting for social justice through service, activism, and advocacy (Barnatt, Cochran-Smith, Friedman, Pine, & Baroz, 2007). To evaluate pre-service teachers, data are collected and analyzed from multiple sources, including classroom observation, written responses, and coursework.

The Pre-Service Performance Assessment-Plus (PPA+, Enterline, Loftus, D'Souza, & Barnatt, 2009) is an adaptation of the Massachusetts state-approved summative standards-based performance assessment for evaluating pre-service teachers during their student-teaching practicum. The PPA+ adds emphasis on promoting student-directed inquiry, equity, and social justice through the explicit expansion of existing standards focused on equity to also incorporate social justice. Additional, the PPA+ also adds several standards focusing on student-directed inquiry (Cochran-Smith, Reagan, & Shakman, 2009). To evaluate teaching for social justice, the PPA+ includes five key attributes: the teacher 1) views pupils' cultural, linguistic, and experiential prior knowledge as assets, not deficits, and builds on them in instructional strategies and activities, 2) fosters a positive environment for learning in the form of social relationships, care and cooperation among and between the teacher and pupils, 3) recognizes and identifies influences from their background and life experience that have an impact on views of education, teaching, and practice, 4) offers specific examples that reflect knowledge and understanding of pupils' lives outside the classroom and the importance of building community and respect as part of the classroom experience, and 5) identifies policies and programs that contribute to, or maintain the existence of, equity

or inequity in education through written reflections and actions. Pre-service teachers provide evidence of meeting these standards through written reflections, lesson plans, and other supporting documents from school and community personnel and are evaluated on a 4-point scale (Boston College, 2009).

Limitations of current assessments. There are several limitations to the social justice assessment instruments currently available within teaching and teacher education. First, many of these assessments conceptualize social justice as an internal process for teachers, focusing on an educator's disposition (e.g. Enterline, Cochran-Smith, Ludlow, & Mitescu, 2008; Dee & Henkin, 2002) or affinity for working with students from historically marginalized groups (e.g. Larke, 1990). This focus on teacher and teacher candidate perceptions and experiences raises issues regarding for whom social justice is meant to be meaningful. If we intend for social justice to be meaningful for the communities, schools, and students that teachers serve, it is necessary to refocus our attention not on teachers' ideation but on their behaviors; social justice can only become meaningful to others when that internal process is translated into action. As a result, instruments that provide feedback on social justice disposition or ideation are insufficient on their own; evaluative tools must provide feedback regarding the degree to which educators enact social justice teaching practices. Additionally, self-report assessments of social justice ideation are extremely susceptible to social desirability, or that respondents might select responses they perceive as social correct even if they fail to align with their personal beliefs (Paulhus, 2001). Evaluating the degree to which educators enact these beliefs through their choice to engage in social justice teaching practices better relates to the individual's social justice motivation than these dispositional assessments.

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In addition to the limitations of social justice dispositional assessments, there are also several limitations to the presently available assessment instruments that evaluate educators' social justice teaching practices. First, many of these instruments (e.g. PPA+, RIPA-TSJ) have not been peer-reviewed, published, or professional distributed. As a result, it is unclear what assessment development processes were utilized in the development of these assessments, the psychometric properties such as reliability and validity of these assessments, nor how these assessments connect to the extant literature on social justice teaching. Second, some of the observational assessments (e.g. RIPA-TSJ) include direct observation as a fraction of the overall assessment and are, therefore, susceptible to measurement error due to social desirability though the other data sources such as writing prompts similar to social justice dispositional assessments. Third, the presently available social justice observational assessments were designed, developed, and situated within a specific context; however, researchers (e.g. Gasker & Fischer, 2014) have suggested that social justice is context specific. It is necessary to examine the transferability of these evaluative criteria to a different context. Fourth, all three of the presently available observational assessments are grounded in culturally responsive pedagogy (e.g. Ladson-Billings, 1995). Although this provides a strong theoretical foundation for these assessments, it is unclear the degree to which these assessments correspond to other theories of social justice such as critical pedagogy (e.g. Freire, 1973), multicultural education (e.g. Banks & Banks, 2009), or democratic education (e.g. Dewey, 1916/2004), nor the degree to which these practices align with those practices identified in the literature in teaching and teacher education. There is a need to examine

the relation of the social justice teaching practices identified within these assessments to other theories of justice and the broader social justice teaching literature within the field.

Philosophical Limitations of Assessing Social Justice. In addition to the practical limitations of assessing social justice outlined above, there also exist significant philosophical limitations. Any social justice assessment, either dispositional or of behavioral, is either explicitly or implicitly grounded in a specific set of metaphysical presuppositions (Byrne, 2016). These foundational assumptions are necessary, but conflict with the assumptions that ground other methods of conceptualizing and examining social justice in teaching and teacher education. For example, an instrument that focuses on an individual's behavior is philosophically at odds with a Marxian conception of agency and resultant political praxis (Feenberg, 2014). This limitation is not at the level of the measurement instrument and, therefore, cannot be overcome through the juxtaposition of multiple analyses (e.g. Darling-Hammond, 2006); rather than complement the understanding of social justice made possible through an assessment, a Marxian analysis would instead critique the assessments' neoliberal function in a capitalistic society (Maistry, 2014). The use of any particular mode of inquiry to examine social justice is necessarily irreconcilable with other conceptions of social justice palpated through divergent modes of analysis.

Statement of the Problem

In order to increase pre-service and in-service teachers' motivation to teach for social justice and increase their propensity for engaging in equitable teaching practices, there exists a need for an assessment instrument that can provide educators structured feedback. In order to be effective, such an assessment must highlight specific teaching

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practices so as to increase teachers' self-efficacy and perceived value for engaging such behaviors. It must be grounded in the empirical literature on social justice teaching, situated in relation to the diverse frameworks for social justice currently available, and highlight practices important to the local context. Additionally, it must demonstrate sound psychometric properties such as reliability and validity. Currently, no such assessment instrument is available within the field of teaching and teacher education.

Simultaneously, there is a need to attend to the philosophical limitations of any such assessment. The development of an assessment designed to provide pre-service and in-service educators' feedback on the inclusion of specific social justice teaching practices involves defining what constitutes social justice, either through explicit operationalization of a specific framework or tacit formalization through the distillation of a definitive set of classroom practices. This structure is a necessary to provide coherent feedback to pre-service and in-service educators; however, calcifying social justice as a set of finite, measurable practices limits what can be understood as teaching for social justice. Although the teaching practices identified and evaluated through this assessment are key practices associated with some conceptions of social justice, they may be ancillary or antithetical to others and irreconcilable with divergent modes of inquiry. In the face of such incompatibility, one solution is to assert one conception of social justice as superior to other. However, such a move both undermines the efficacy of other frameworks which are uniquely able to address various inequities and ignores the limitations of the selected framework (Rosiek & Kinslow, 2015), a move fundamentally at odds with the idea of social justice.

Thus, the issue of realizing educations' liberatory potential rests on a paradox. On the one hand, there exists the need for the development of a formative assessment that evaluates pre-service and in-service teachers' engagement in social justice classroom practices grounded in motivation theory and calcified around a clear, consistent theoretical and philosophical foundation. On the other hand, there exists the need for social justice to resist such ossification in order to retain the requisite plasticity needed for the idea to avoid reinforcing a singular conception of justice at the expense of others. As Peck, Singer-Gabella, Slone, and Lin (2014) argue, teaching and teacher education is currently "driving blind" (p. 9) and in need of clear direction. Individuals in the field need to "take the blindfold off and pay closer attention to where we have been and where [sic.] are going in teacher education" (p. 24). Although Peck et al., ultimately advocate for more uniform evaluation of teachers and teacher candidates, an alternative solution to both the metaphorical problem the authors evoke and the present paradox is the development of a map for realizing social justice in teaching and teacher education that retains the complexities and incongruent nature of the ideal. It is this critical cartographic project that this dissertation – "Teaching for Social Justice: Palpating the Tensions between a Royal and Minor Science" – aims to fulfill.

Purpose of this Study

The current study served two purposes. First, in this study I developed and evaluated a formative assessment that provided educators feedback regarding their engagement with specific social justice teaching practices. Second, I simultaneously explored the philosophical limitations of developing this social justice assessment.

First, given the need for evaluations of social justice made meaningful through teacher's classroom actions and not only as an internal process, in the present study I developed a formative assessment instrument aimed at evaluating the degree to which pre-service and in-service teachers engage in specific social justice teaching practices. The development of this social justice formative assessment instrument required the construction of an operational definition of social justice, one grounded in the local context but also interconnected with broader constellations of social justice teaching practices supported by the extant literature in teaching and teacher education. Additionally, it required the evaluation of an assessment instrument developed out of the operational definition. Finally, the reliability of the assessment instrument was evaluated through pilot-testing the assessment on a sample of classroom videos.

Second, given that calcifying social justice as a set of discrete set of practices comes at the expense of other possibilities, this study also considered the philosophical limitations of the assessment development project. This included examining the ways in which this operationalization of social justice as a measurable construct was at odds with other possible conceptions, enactments, and affections of social justice. Currently, the numerous and often conflicting recommendations for teacher educators produced by varied conceptions and operationalizations of social justice either serves as a paralytic – as attested to by Sturtman's (1997) call to abandon the ideal – or lead to a post-hoc rationalization for the perpetuation of current practices (McQueen, 2016), a tautological fallacy. In order for social justice to serve as a meaningful and productive commitment within the field of teacher education, it is imperative that research critically examines what the idea does: an examination of the philosophical limitation of the resultant

calcification of social justice as a set of discrete practices. To address these twin

questions, in this study I answer the following research questions:

Research Questions

1) Can a formative assessment instrument be developed that is a sufficiently
   reliable and valid measure of pre-service and in-service teacher's engagement
   in specific research-supported and locally valued social justice classroom
   behaviors? In order to answer this question, I address the following sub-
   questions:

   1a. Is it possible to identify key attributes of teaching for social justice
   both in the extant literature on teaching and teacher education and within a
   teacher preparation program in the Pacific Northwest? What are these key
   attributes and their indicators?

   1b. Are those attributes relevant and necessary to teaching for social
   justice, and if so, is it possible to categorize them within an extant
   framework for organizing teaching practices?

   1c. Can an assessment designed to provide in-service and pre-service
   educators feedback on the presence of such attributes of teaching for
   social justice be scored reliably and do how do the items function?

2) Is it possible to consider the philosophical limitations of the assessment
   development process in a way that allows social justice to retain its liberatory
   potential?

Theoretical Framework

This study is situated within the paradoxical need for a formative assessment evaluating teachers' classroom practices and the inability of that measurement project to fully realize its expressed social justice aims due to its philosophical limitations. In order to attend to this tension, I use Deleuze and Guattari's (1980/1987) concept of *cartography*[2] as a theoretical framework to help negotiate the points at which the measurement project must undermine itself for social justice to retain its liberatory potential.

In *A Thousand Plateaus,* Deleuze and Guattari (1980/1987) differentiate the mapping approach from its counterpoint, tracing. Tracing, or representation, attempts to capture and authentically reproduce aspects of a presumably stable and fixed reality; however, there are several practical and philosophical concerns with this practice. Practically, a model with a one-to-one correspondence to reality (the most authentic representation) would be unwieldy, as Carroll (1893) and Borges (1954/1972) humorously portray and even the most ardent of realists, Pierre-Simon Laplace (1840/1902), acknowledged as impractical and impossible. Thus, all attempts at representation through tracing are necessarily incomplete simplifications, or as the statistician George Box (1979) notoriously quipped, "all models are wrong but some are useful" (p. 202). At a philosophical level, however, Deleuze and Guattari argue it is not the model that is wrong, but the very act of modeling. Modeling, as a function of tracing, subordinates that which exists to a system of formal knowledge; the model presupposing reality. This can be readily seen within statistics, as the variables included in an analysis

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[2] Throughout this dissertation, key philosophical terms are italicized when first introduced in each chapter. All key philosophical terms are defined in the glossary presented in Appendix A.

presuppose the relation of the underlying reality; what is and can be is limited to the terms included within the model. Although there is a valuable and pragmatic utility to this approach, the fixed structure of the analytic model denies the possibility of contingent, creative, and innovative possibilities.

Conversely, a cartographic project, or mapping, aims to avoid rigidity and instead offers insight into contingent, emergent possibilities: "what distinguishes the map from the tracing is that it is entirely oriented toward an experimentation in contact with the real" (Deleuze & Guattari, 1980/1987, p. 12). Thus, the aim of mapping is not an authentic reproduction of the real, but a purposive palpation of reality aimed at the genesis of new connections and possibilities. The delineation of mapping from tracing hinges on the notion that the object of experimentation is not captured through research to be represented as the facsimile of an external "truth," but rather that the object itself is produced through experimentation in connection with the real. Thus, the aim of cartographic research is not to uncover an *a priori* reality, or "what is," but to explore possibilities, or "what could be." This is not to suppose that mapping and tracing are irreconcilable projects, but rather that "*the tracing should always be put back on the map*" (Deleuze & Guattari, 1980/1987, p. 99-100; emphasis in the original). Deleuze and Guattari do not reject the production of the model; they reject the assumption that the model is an authentic representation of reality. The model ought to be considered a singular, purposive palpation of the real: a contingent possibility whose object does not precede the act of inquiry, but rather is produced concurrently.

Cartography serves as a useful framework for retaining the paradoxical nature of social justice; however, it is insufficient for conceptualizing this complexity. Therefore,

there is a need for a concept that can help elucidate the paradoxical nature of social

justice. One limitation within present social justice scholarship in teacher education is the

uni-dimensional examination of social justice within any given analysis. Much in the way

that a geographic map providing only degrees of latitude or longitude would be of limited

utility to an individual traversing physical space, research examining social justice

through a singular mode of thought fails to take into consideration the multiple and

conflicting facets of social justice. For example, through careful philosophical analysis

Ortiz and Rhoads (2000) offer a powerful disruption of the presuppositions that underpin

a certain mode of multicultural education that perpetuates white supremacy. Although

this scholarship is well reasoned and provides clear and actionable commitments, it is not

possible through this mode of analysis to empirically test the impact programmatic

changes might have on the problem the authors identify; there is no null-hypothesis test

for white supremacy in multicultural education. Furthermore, the deconstruction of racial

identity undermines other modes of political action that are dependent on stable racial

identities (Rosiek & Kinslow, 2016).

One way in which Deleuze and Guattari provide a concept for attending to this

multidimensionality is through the relation of what they term a *royal* and *minor language*

or science (Deleuze & Guattari, 1980/1987), or "a major and minor inquiry" (Mazzei,

2017; Mazzei, Graham, & Smithers, 2018). Deleuze and Guattari argue that major and

minor are not two different languages but rather two different treatments of a language

(Deleuze & Guattari, 1980/1987, p. 103). A minor language, by its very nature, is not

external to, but a deterritorialization of a major language; Kafka does not write outside of

German but in such a way as to make German unintelligible to itself. To speak of a minor

inquiry (e.g., Mazzei, 2017) is not to reject the methods and methodologies employed within the current epoch of social science inquiry but a call for experimentation from within research, constructing a continuum of variation around knowledge production. A minor inquiry seeks to (re)orient research not toward perceived structural invariants and constants (the objective of a royal science) but to the novel, the excessive, the "regulated, continuous, immanent process of variation" (Deleuze & Guattari, 1980/1987, p. 103, emphasis in the original). A minor inquiry attends to the omnipresent "cutting edge of deterritorialization" (Deleuze & Guattari, 1980/1987, p. 57) of research by seeking to make its methods "stutter" (Deleuze & Guattari, 1980/1987, p. 107).

The value of leveraging Deleuze & Guatteri's (1980/1987) concept of a minor literature is not that it sabotages the assessment development process, but that it shakes the certitude associated with traditional methods and methodologies – "it is not the slumber of reason that engenders monsters, but vigilant and insomniac rationality" (ibid, p. 112). Instead of an either/or research approach, I leverage the concept of a minor inquiry through a cartographic framework to think with the "and" – "Thinking *with* AND, instead of thinking IS, instead of thinking *for* IS: empiricism has never had another secret. Try it, it is a quite extraordinary thought, and yet it is life" (Deleuze & Parnet, 1977/1987, p. 57). Leveraging this concept allowed me to think with AND to hold on to both the old and the new empiricisms (St. Pierre, 2016), to attended to the political immediacy of the present milieu in desperate need of social justice while holding open the possibility of new modes of relations not yet knowable. By avoiding the need for convergence around a singular "truth," mapping the idea of social justice within the

tensions of a major and minor science allows for the juxtaposition of competing, partial, and contingent "truths."

Mapping provides a unique, multi-dimensional portrait of social justice within teaching and teacher education. Although these multifaceted results provide contradictory images, these ruptures are precisely the strength of such an analysis in an area that has lacked consensus. Instead of attempting to reconcile contradictions, the purpose of this analysis is to hold these discrepancies as particularly salient. As a result, the goal of the present study was to avoid offering a disingenuously simple conception of social justice and instead provide professionals within the field a framework for understanding the issue's complexities. By doing so, this project elucidates some of the possibilities and limitations various applications of the idea might have in the field and offer some possible directions for both practitioners and researchers in the field.

Scope, Assumptions, and Limitations of Study

The scope of the present study was to work with pre-service educators, in-service educators, and faculty at a large research university in the Pacific Northwest, as well as in the surrounding community, in order to develop a formative assessment that con provide educators feedback regarding the use of research supported and locally valued social justice teaching practices. Although this research was grounded in the larger body of scholarship engaging social justice teaching, the study's focus was on the conception of social justice identified as relevant to this context.

This study was predicated on several assumptions. First, it was assumes that the students and faculty at the university and in the surrounding community were committed to teaching for social justice. Given the expressed aims of the program, curriculum

already in place and delivered to students, and verbal assertions and actions of many of these individuals, it seems that each was engaging in and aims to enact some conception of social justice. Second, this study assumed that enacting social justice in the classroom is a process that will be visible to an external reviewer through cross-sectional observation. This assumed that the observed lesson were typical example. Furthermore, it required a conception of social justice as discrete action and not as a process, a requirement at odds with some conceptions of social justice. This assumption highlights the importance and necessity of the concurrent philosophical project to not foreclose process-oriented conceptions of justice.

There were also numerous limitations to the present study. First, the use of expectancy-value theory to theorize and better understand the underlying motivational factors influencing whether a pre-service or in-service teacher engages in social justice teaching practices was task specific rather than general or domain specific. Although this was particularly useful in conjunction with the social justice formative assessment instrument in examining discrete classroom practices, expectancy-value theory can only provide limited insight into pre-service and in-service educators' motivation towards social justice more broadly. Second, many inferences regarding these underlying factors were derived from the literature on teaching for social justice. The extant scholarship analyzed through this secondary analysis often lacks detail and specificity regarding these underlying motivational factors, as this concept was not within the purview of those studies.

The social justice formative assessment developed within this study was limited by the specific conception of justice it operationalizes, one developed with and reflective

of the values of faculty and students, at the expense of other conceptions of justice. This was both a limitation of the assessment and the focus of the concurrent philosophical analysis. The pilot-test of the assessment was too small of a sample to run some validity and reliability statistical analysis, specifically exploratory and confirmatory factor analyses within a structural equation model framework (Kline, 2015) and some item response theory models. As a result, further and continuing analyses of the assessment is still be necessary. Additionally, the small and relatively homogenous sample used in the development, evaluation, and pilot-testing of the assessment limits the assessment's generalizability to other contexts. Additional analyses are necessary to support the usage of the assessment in other contexts.

The philosophical analyses were limited by their abductive qualities which, by definition, necessitate that these examinations are not aimed at presenting generalizable results but rather serve to highlight limitations and unrealized possibilities undermined by the assessment project. Similar to the limitations inherent to the assessment project, the adoption of any philosophical framework, even one which aims to resist subsuming or supplanting the diverse conceptions of justice, functions to make some things possible at the expense of others. The use of a cartographic framework is not a panacea to this issue, but serves to retain some possibilities for social justice that would be otherwise made impossible through the assessment project. Furthermore, the use of Deleuzoguattarian philosophy is itself problematic, as even as it resists colonization it functions as a return to Western thought at the expense of other knowledge systems (Wuthnow, 2002). Additionally, the notorious difficulty and density of Deleuze and Guatteri's writing (McCaffery, 2003) functions to limit access to these conversations.

Summary

Currently, our education systems are failing to meet the needs of the diverse students and communities they serve. In order for schools to resist reproducing systemic inequities, it is imperative that teachers engage in social justice teaching practices. To support educators' motivation to engage in social justice teaching practices, it is necessary to develop a formative assessment to provide them structured feedback as they seek to include these practices in the classroom. However, this framework and assessment functions to limit social justice in a manner that precludes the possibility of fully realizing its liberatory potential. Therefore, teaching for social justice rests on the paradoxical need and limitation of this project. For social justice to retain its prophetic possibility, the development of this formative assessment must be nested within a philosophical framework that allows for the juxtaposition of competing truths and avoids the domination of one conception of justice over other antithetical possibilities.

Towards this end, in Chapter II I review the prominent theories of justice and the extant literature in teaching and teacher education to identify teaching practices that serve as key attributes of social justice teaching across philosophic frameworks and conceptions of social justice. In Chapter III I outline the methods for developing and evaluating a social justice formative assessment and for examining the philosophical limitations of this process. I present the results of these analyses in Chapter IV. In Chapter V, I discuss the concurrent results of the assessment development process and philosophical analyses, identify implications for research and the field of teaching and teacher education, and conclude by attending to the limitations of the present study.

CHAPTER II

REVIEW OF THE LITERATURE

In this chapter I explored teaching practices identified as key attributes of teaching for social justice through two separate techniques. First, building off of the work of Dover (2009), I explored five prominent theories of justice and identified teaching practices grounded in theoretical literature on social justice teaching. Second, I identified prevailing practices associated with teaching for social justice explicitly articulated within empirical research in teaching and teacher education. In order to catalog these practices, I employed the theoretical framework developed by O'Brien, Steward, & Moje (1995) and outlined in the following section. Finally, in the last section of this chapter I briefly discuss how the teaching practices I identified in the empirical research on teaching and teacher education connect to the specific theories of justice identified by Dover (2009).

Theoretical Framework

As a schema for better understanding the complexities of schooling and different domains in which teachers exert influences, O'Brien, Stewart, & Moje (1995) offer a three-part framework consisting of 1) classroom culture, 2) curriculum, and 3) pedagogy. Within this framework, classroom culture corresponds to the "where" of learning, curriculum to the "what," and pedagogy to the "how." Building on the sociocultural works of Marcus (1986), O'Brien, Stewart, & Moje (1995) operationalize classroom culture as "the representation of how individuals… construct their work lives within a system based on their shared beliefs, practices, symbols, and knowledge" (p. 452). This concept of classroom culture addresses important attributes of the broader education

milieu unaddressed by analyses of only curriculum and pedagogy; however, although the authors also consider attributes of the physical learning environments in the context of their analysis, the colloquial usage of the term "culture" obfuscates this expanded meaning. Therefore, within this study I supplant the authors' usage of the phrase "classroom culture" with the more broadly used term "learning environment" (e.g. Abbott, Guisbond, Levy, & Sommerfeld, 2014). I present this three-part framework in Figure 2.1 and expand on each domain in the following sections.
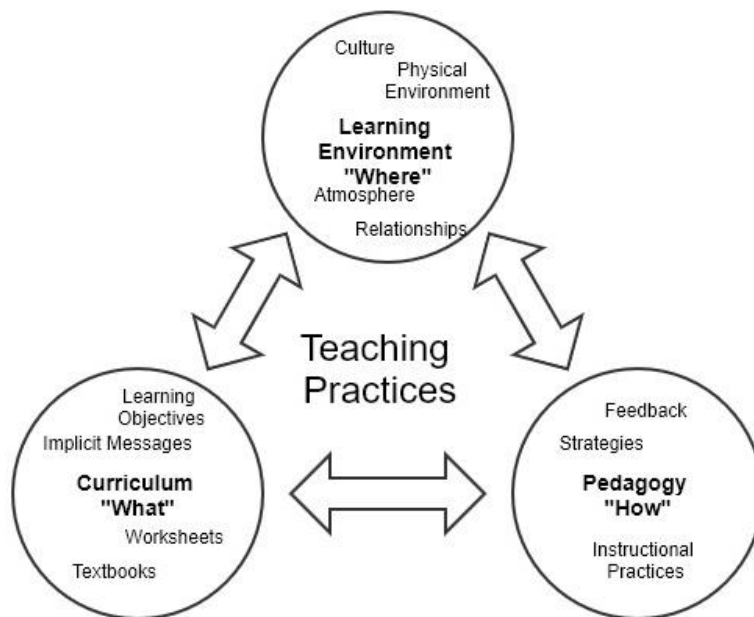
Figure 2.1. Theoretical framework for exploring key domains of teaching practices; 1) they nature of the learning environment they cultivate, 2) the curriculum they select, develop, and enact and 3) the pedagogical practices they employ. Adapted from O'Brien, Stewart, & Moje (1995).

Within the present study, the term "learning environment" corresponds to the physical and nonphysical aspects of the classroom; the "context" (Balsam, & Tomie, 2014) or "where" of learning. The learning environment includes both the materials

present in the classrooms and how they are used (e.g. the arrangement of desks, chairs in the classroom, and the usage of technology) and how the teacher fosters the general classroom atmosphere (e.g. how the teacher models and facilitates interpersonal interactions). How a teacher prepares this learning environment matters, as it relates to how students develop academic and non-academic competencies in addition to moderating students' motivation for engaging in different activities (Holland, 1997). The learning environment can play an important role in influencing students' self-perceptions of competency, attitudes, skills, and values (Anagün, 2018) and sense of well-being, belonging, and personal safety. How the teacher models and facilitates interpersonal interactions are also important aspects, as the ubiquity of phrases such as "positive learning environment" are often used in reference to the general tenor of the classroom atmosphere (Abbott, Guisbond, Levy, & Sommerfeld, 2014). Creating an effective learning environment is an important aspect of a teachers' role in helping students engage in and take responsibility for their own learning (National Research Council, 1996).

If the learning environment is the "where" of education, then curriculum could be understood as the "what." Curriculum is often used to refer to the specific academic content adopted by federal, state, and local educational institutions and presented through learning materials such as textbooks; however, the delivery of this "intended" curriculum is mediated through the complexities of the classroom and how the teacher delivers the content to students, or "implemented" curriculum (Kelly, 2009). This is further complicated by the fact that the "written" curriculum only captures a small portion of what students learn in schools. The totality of what students' learn in schools also encompasses social norms, discourses, values, and beliefs in excess of the explicate

content (e.g. Anyon, 1980). Although there is considerable importance with education as to the specific aims of instruction and academic content, the implicit curricula also has a significant impact on student outcomes (Hafferty & Gaufberg, 2013).

Finally, pedagogy corresponds to the practices and strategies a teacher employs to deliver curriculum to students, or the "how" of teaching (Knowles, 1970). This includes the actions and techniques a teacher uses as well as the judgements they make, informed by their implicit or explicit understanding of how students learn, comprehension of the background of students, and connected to the interests and needs of individual students (Lee, 1987). Pedagogy can be understood as how teachers bridged the context of the broader community to academic learning goals (Petrie et al., 2009). Pedagogical approaches to learning include prominent theories such as differentiated instruction (e.g. Hall, 2009), critical pedagogy (e.g. Kincheloe, 2008; Ladson-Billings, 1998, 2014), dialogic learning (e.g. Kincheloe & Horn, 2007), and student-centered learning (e.g. Jones, 2007). Effective pedagogy – that is, techniques and strategies which successfully facilitate students comprehension of curricular content – share four key attirubtes; 1) they have clear goals, 2) they are imbued with high expectations, 3) they are appropriate for the expressed purpose, and 4) they are theoretically sophisticated (Ireson, Morimore, & Hallam, 1999).

Although learning environment, curriculum, and pedagogy each have unique attributes and differently explain aspects of teaching, there is significant overlap across these three domains. As O'Brien, Stewart, & Moje (1995) articulate, "[a]lthough we separate these components of... schooling for the purpose of argument, in reality they are interwoven and interactive" (p. 447). For example, the context of learning has a direct

influence on the strategies a teacher can employ within that space (i.e. the learning environment mediates possible pedagogical approaches to learning, e.g. Huffman, Goldberg, & Michlin, 2003) as does the curriculum (Wood, 2004). Conversely, the pedagogical approach a teacher employs also relates to and influences the curriculum (Browning, Meyer, Truog, & Solomon, 2007). It is imperative, therefore, to consider these three domains as interconnected and interdependent when conceptualizing a theory of teaching for social justice.

Practices within Prominent Theories of Justice

Given the aforementioned ubiquity of social justice in teaching and teacher education (e.g. Mills & Ballantyne, 2016) and the plurality of formal theories of justice (to say nothing of informal and locally held conceptions), it is necessary to contextualize how teachers enact social justice through how they foster an inclusive learning environment, implement a justice-oriented curriculum, and engage in equity-focused pedagogy in relation to specific philosophical and theoretical notions of social justice. Although there are countless conceptions of social justice, Dover (2009) highlights five prominent theories in teaching and teacher education; 1) social justice education, 2) culturally responsive pedagogy, 3) multicultural education, 4) critical pedagogy, and 5) democratic education. The author contends that, although these theories of justice share many similarities and theoretical foundations, each uniquely contributes to our broader understanding of equity-based education. In Figure 2.2 I present the unique contributions each theory adds to our broader understanding of social justice, adopted from Dover (2000, p. 511). In the following sections I introduce and articulate key ideas associated with these six prominent theories of justice. Then, building out of the theoretical

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literature I highlight teaching practices associated with how educators foster a learning environment, adopt a curriculum, and enact pedagogical practices associated with and indicators of each theory of justice.
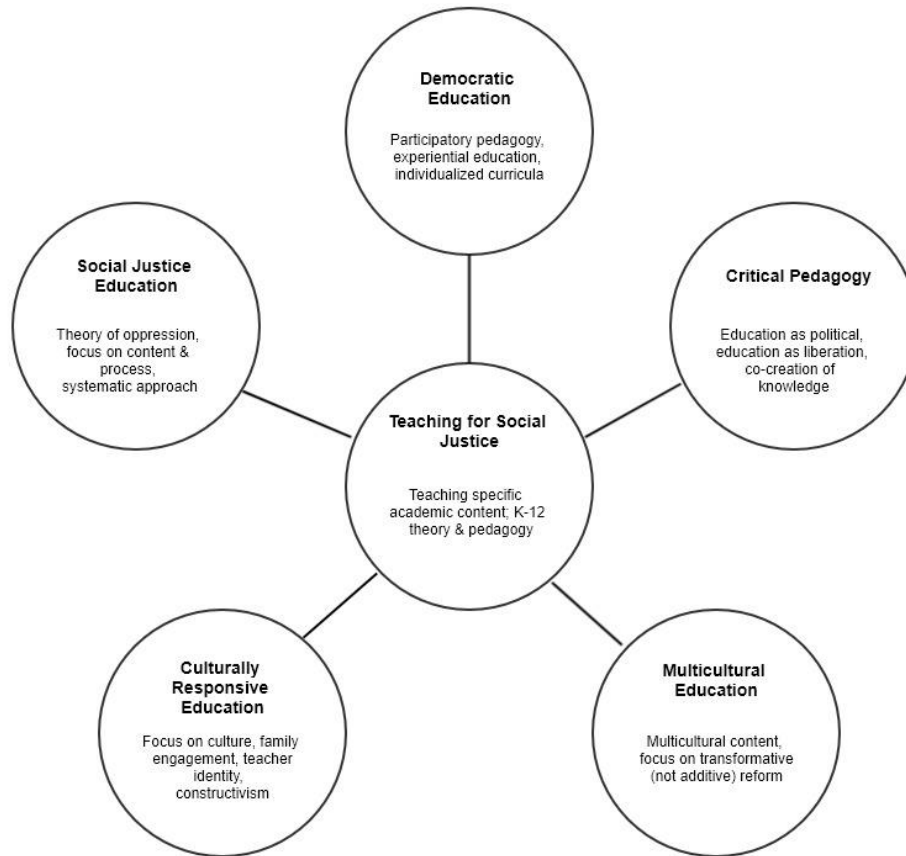
Figure 2.2. Conceptual and pedagogical foundations of teaching for social justice identifying prominent theories of justices and their key contributions. Adapted from Dover (2009).

Social Justice Education

Although the term "social justice education" is ubiquitous in education (Mills & Ballantyne, 2016) and informs the general structure of the present study, within the present context, Social Justice Education (SJE) corresponds to a specific set of educational philosophies and principles. Specifically, SJE focuses on educational content

and processes as key mechanisms for resisting oppression using a systemic approach
(Dover, 2009). As Bell (2007) articulates, SJE functions as both a framework for
conceptualizing various forms of oppression in addition to a "*set of interactive,
experimental pedagogical principles and methods/practices*" (p. 4, emphasis in the
original). As such, SJE aims to support educators in providing K-12 students the
necessary tools to understand oppression in society and to connect this understanding to
action.

SJE conceptualizes oppression as multifaceted, having such features as being
pervasive, cumulative, durable, hierarchical, hegemonic, internalized, intersecting, and
restrictive (Bell, 2007). Oppression is pervasive in that it is imbedded in institutions such
as our history, laws, culture, and educational systems (Bell, 2007). It is cumulative in that
the effects of oppression aggregate over time, such as the current economic impact of
historical disenfranchisement and divestment in the black community (Sampson &
Wilson, 1995). It is durable in that the mechanisms through which oppression functions
are mutable, changing how it functions while maintaining the same structures of power
and privilege (Haney-Lopez, 2015). Oppression is hierarchical as it confers advantages
and privilege to members of some groups explicitly at the cost to members of other
groups (Cudd, 2006). It is hegemonic in that these patterns of disenfranchisement are
maintained not through coercion, but through a process of normalization (Simon, 2002),
leading individuals in both the dominate and subordinate groups to internalize these
hierarchical relations as they make sense of the world through both language and practice
(Bell, 2003). Oppression is intersectional, as individual identity and relation to structures
of power functions simultaneously in concert along perceptions of various socially

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constructed identity groups with the aggregate of these identities more than the sum of its parts (Collins, 1990).

Philosophically, SJE builds on Marxist theories of education (e.g. Bowles & Gintis, 1976) critical pedagogy (g. Freire, 1973), Critical Race Theory (e.g. Bell, 1992), and post-structuralism (e.g. Butler, 1990; Lather, 1992; McDermott, 2001). SJE leverages Marxists theories of education to analyze and critique systems of power, examining how social systems perpetuate inequity by benefiting some at the expense of others (Bell, 2003). From critical pedagogy, SJE adopts the need for educators to develop a "critical consciousness" (Freire, 1973, p. 183) through reflexive practices to develop an awareness of social and political factors which perpetuate inequity and to take action against these modes of systemic injustice. To do so, SJE draws on counter-narratives techniques adapted from Critical Race Theory in order to challenge mainstream narratives which legitimize inequity (Bell, 2003).

SJE teaching practices focus on facilitating a learning environment for the development of liberatory thinking and action (Carlisle, Jackson, & George, 2006). Teachers are tasked with fostering an atmosphere which challenges oppressive attitudes and behaviors (Carlisle, Jackson, & George, 2006), recognizing inequitable practices and behaviors and diminishing them (Lalas, 2007). Teachers modeling and supporting students in demonstrating appreciation for diversity (Lalas, 2007), promote equality, advancing broad-mindedness, and encourage voice and expression (Brooks & Thompson, 2005). Teachers model and provide students opportunities to engage in reflexive practices and foster and atmosphere which values multiple perspectives (Carlisle, Jackson, & George, 2006). Teachers provide counseling and support that meets the needs of the

diverse students they serve (Carlisle, Jackson, & George, 2006). Teachers build an inclusive learning community, built on a culture of care (Lalas, 2007), across social identity groups and strong relationship between schools and the broader community (Carlisle, Jackson, & George, 2006).

In addition to fostering an inclusive atmosphere, SJE also focuses on developing a multicultural curriculum (Carlisle, Jackson, & George, 2006) that is attentive to the social, political, and economic realities of students and families (Bemak & Chung, 2005) and guides instruction (Lalas, 2007). This curriculum explicitly attends to the nature and manifestation of all forms of social oppression and provides strategies for intervening in oppressive situations (Carlisle, Jackson, & George, 2006).

SJE instructional practices include a desire to raise the level of social awareness of their students by modeling and analyzing the purposes, practices, and policies of school and the impact on students' life opportunities, raising the level of social awareness of their students (Lalas, 2007) and promoting social identity development (Bell, 2003). Teachers do this through "participatory pedagogies" (Carlisle, Jackson, & George, 2006, p. 58), guiding students in working together as a learning community (Bell, 2003), facilitate student engagement in classroom inquiry and focus on students' critical thinking and engagement (Lalas, 2007) and inviting multiple perspectives (Carlisle, Jackson, & George, 2006). Teachers make instructional adaptations for diverse students to remedy any problems in securing equitable access to instruction and assessment (Solomon, Lalas, & Franklin, 2006) while holding all students to a high standard of excellence (Carlisle, Jackson, & George, 2006) and facilitate equitable participation and allocation resources (Lalas, 2007).

Culturally Responsive Pedagogy

Culturally responsive pedagogy (CRP) aims to use cultural knowledge, prior experience, frame of reference, and performance styles of diverse students to make learning relevant to students through their individual strengths (Gay, 2010). By refocusing educational practices and discourse away from dominate culture practices, CRP aims to validate and affirm students' diverse cultures (Gay, 2010a). CRP aims to meet the learning needs of culturally different students (Harmon, 2012). CRP is also alternatively referred or connected with similar social justice practices such as mitigating cultural discontinuity education (e.g. Macias, 1987), culturally compatible education (e.g. Jordan, 1985), culturally congruent education (e.g. Mohatt & Erickson, 1981), and culturally appropriate education (e.g. Au & Jordan, 1981).

Django Paris (2011) further elaborating on this concept by positing a culturally sustaining pedagogy, arguing that CRP had often focused on leveraging students' culture towards realizing traditional academic outcomes that serve as the foundation for many inequities in education (Alim, 2007) rather than support students' learning within their cultural context. Through culturally sustaining pedagogy, Paris (2011) sought to highlight the need to redefine desired academic outcomes that align with students' cultural practices. This reformation requires not only attunement of teachers' pedagogical practices, but also the realignment of academic outcomes within the cultural context of school communities. Importantly, this notion of culturally sustaining pedagogy aligns more closely with Ladson-Billings' (1995a) critique of "culturally appropriate, culturally congruent, and culturally compatible" (p. 467) education than how scholars had narrowly conceptualized and applied CRP within their own research (Ladson-Billings, 2014).

Philosophically, CRP connects to historic critiques (e.g. Woodson, 1933) of hegemonic practices embedded within the foundation of American schooling and the decolonial philosophies of Rastafari (e.g. Bamikole, 2014), Fanon (e.g. 1970), and Diop (e.g. 1989) (Johnston, Montalbano, & Kirkland, 2017). CRP is informed by Critical Race Theory (Ladson-Billings, 1995a) which highlights how racism is produced and reproduced through practices and policies within schools (Ladson-Billings, 1998). Black Feminist Thought (e.g. Collins, 1990) is also cited as a significant philosophical influences of CRP (Landson-Billings' 1995a), particularly the notion that it is not possible to differentiate between the social construction of reality and historical material conditions (Bohrer, 2018). As such, CRP negotiates the tension between microanalyses of how culture practices mediated relationships between teachers and students, and the macrostructural work of understanding and resisting how school systems produce and reproduce social inequities (Ladson-Billings, 1995a).

Key in CRP, teachers must incorporate elements of students' culture and experiences into their classroom practices (Harmon, 2012). To do so, teachers must engage students on a personal level, allowing them to share personal stories, ideas, and aspirations. It is only through cultivating and sustaining these deep personal relationships that teachers can integrate students' cultures and experiences into instruction (Irvine & Armento, 2001).

In order to meaningfully incorporate students' interest and culture, one foundational practice of CRP is that teachers must develop meaningful relationships with all students (Ladson-Billings, 1995a; Irvine, 2002). This includes providing students opportunities to share personal stories and important, meaningful aspects of their lives

both within and outside of school (Harmon, 2012). Additionally, teachers may use team- and community-building activities to continue to develop and sustain these relationships (Lee, 1999). Through and as a part of these relationships, teachers acknowledge the legitimacy of students' cultural heritage, modeling and fostering an atmosphere of acceptance (Gay, 2010). Rather than adopting a managerial approach to classroom management, CRP involves fostering an atmosphere in which students are accountable to each-other (Ladson-Billings, 1995a)

To bridge the gap between academic content and students' cultural context, it is imperative that teachers include materials that connect and reflect the diverse cultural experiences of students (Landson-Billings, 1995a, Lee, 1999). These texts can provide a deeper understanding of social complexity than the often one-dimensional portrayals offered in traditional textbooks (e.g. Sleeter & Grant, 1991). These texts are important in providing students with a both personally meaningful and academically challenging curriculum (Lee, 1999).

Although CRP does not outright reject traditional academic content, one core aspect of CRP is facilitating careful, thoughtful critiques of traditional curriculum. CRP calls teachers to model and provide students opportunities to examine the hegemonic function of traditional curriculum, considering whose knowledge is being taught and how this knowledge functions to reproduce social inequity (Villegas & Lucas, 2002). Additionally, CRP focuses on developing communities of learners (Ladson-Billings, 1995a) where students focus on collaborative, rather than competitive learning (Ladson-Billings, 1995a). CRP involves teachers holding students to high academic standards (Lee, 1999) while providing support, scaffolding, and formative feedback (Johnston,

Montalbano, & Kirkland, 2017) Teachers build a bridge between students' culture and school (Gay, 2010) through interactive, hands-on learning (Lee, 1999) and address real-world problems (Ginsberg & Wlodkowski, 2009). Rather than dominated by teacher-centric pedagogy, CRP focuses on student agency (Lee, 1999) and student-directed learning in the form of project-based and action research (SooHoo, 1993).

Multicultural Education

Multicultural Education (MCE) aims to reform educational intuitions so they can better meet the needs of students from diverse racial, ethnic, social-classes backgrounds (Banks, 1993) in addition to the needs of students of different gender identity (Klein 1985) and gender expression (Mayo, 2010). MCE also aims to attend to the intersectionality of membership in these diverse groups (Grant & Sleeter, 1986). Although MCE is often conceptualized and enacted particularly around changes to curriculum (Gray, 1991; Leo, 1990), MCE recognizes that in order to realize educational equity, other significant changes must be made (Banks, 1993), including changes to instructional materials, pedagogical techniques, teacher and administrator dispositions, and the culture of academic intuitions (Banks, 1992, 1993; Bennett, 1990). Ultimately, MCE aims to transform educational systems, not simple enact additive reforms (Dover, 2009).

MCE is organized around five key dimensions; 1) content integration, 2) knowledge construction, 3) prejudice reduction, 4) equity pedagogy, and 5) school culture (Banks, 1993). Content integration involves how aspects of various cultural and gender groups are incorporated into curriculum. MCE posits that teachers should use examples from various groups in order to better illustrate content area concepts and ideas.

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Knowledge construction calls on teachers to attend to the social construction of knowledge, elucidating for students how knowledge is influenced by racial, ethnic, social-class, and gender positionality (Berger & Luckman, 1966; Gould, 1981). MCE also calls on educators to enact interventions to help reduce students' prejudices and develop more positive racial, ethnic, social-class, and gender understandings (Banks, 1991). In addition to enacting prejudice reducing interventions, MCE calls on teachers to use teaching methods which improve learning outcomes for students from diverse and often perceived as low-status groups (Delpit, 1988; Banks, 1993). Finally, MCE aims to promote an empowering school culture in which the culture within academic institution is fundamentally changed in order to better support students from diverse backgrounds (Cummings, 1986). To accomplish this, Banks (1993) proposes that five key areas must be addressed in MCE curriculum: 1) personal & cultural knowledge, 2) popular knowledge, 3) mainstream academic knowledge, 4) transformative academic knowledge, and 5) school knowledge.

MCE originates and is grounded within a liberal philosophic tradition and serves as a practical response to increasing racial and ethnic diversity in schooling in addition to increased awareness concerning social class and gender issues (Dhillon & Halstead, 2002). MCE aims to balance the tension between justice, liberty, and equality (Halstead, 1996) and, to balance these concerns, is grounded on two principles – respect for differences and preparing students for membership in a pluralistic society (Halstead, 1995). Kincheloe and Steinberg (1997) highlight MCE's emphasize on the "common humanity" (p. 10) and natural equality of all people, articulating the need to create space and opportunity to celebrate diversity. Simultaneously, to fully participate in diverse

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communities, MCE aims to facilitate respect for differences, nurturing students'

capacities for tolerance, respect, compassion, and understanding (Dhillon & Halstead,

2002).

Within MCE, social inequity is understood as an institutional problem and

transforming educational systems requires comprehensive school reform (Gorski, 2006).

However, there are several positive, equity-focused teaching practices associated with

MCE (Bennett, 1986). In order to support MCE, it is imperative that teachers foster an

atmosphere of caring for all students, or as Nieto (2013) articulate, education might better

be understood as "an act of love" (p. 44). Teachers can foster this atmosphere by

modeling and providing students opportunities to practice inclusive practices (Banks,

1993) such as self-reflection, inclusive language, and demonstrate empathy and

responsibility (Nieto, 2013). Additionally within MCE, teachers support students in

understanding the dependence of ethnic identity on the context of learning, views and

beliefs of prevailing social groups (Sultanova, 2016) and disrupt these hegemonic

systems by honoring students' identities and demonstrates a belief in their future (Nieto,

2013)

One key way in which MCE can redress institutional issues is by addressing

inequities and inadequacies within curriculum (e.g. Gay, 1995). To do so, one key MCE

practice is to incorporate materials which are inclusive of the diverse experiences of

students from a variety of background, particularly those from historically marginalized

groups (Banks, 1993). Dominate narratives are disrupted through the inclusion of

materials which challenge prevailing assumptions and develop multiple historical

perspectives (Bennett, 1990). In general, MCE curriculum is conceptualized to facilitate

students' understanding of how knowledge is constructed and reflects ideologies, interests, and experiences. (Banks, 1993).

Within MCE, teachers meet students' learning needs by using information on different cultures and social groups in the content of subjects (Sultanova, 2016), incorporating examples that reflect the diversity of the classroom and community (Banks, 1993). Teacher use an individual approach to students of different racial, cultural, social, economic, and language-specific groups to enhance academic progress (Sultanova, 2016) while challenging status quo assumptions about what constitutes knowledge (Nieto, 2013). Teachers strengthen cultural consciousness and build on social action skills (Bennett, 1990) by helping students develop a critical perspectives on learning, attending to the influences of racial, ethnic, and social and class positions of a society on conceptions of knowledge (Sultanova, 2016).

Critical Pedagogy

Critical Pedagogy (CP) is an extension of post-Marxist critical theory to schooling, exploring the role of academic institutions in perpetuating systemic injustice and working towards realizing the emancipatory potential of education (Kincheloe, 2008). To do so, CP aims to revolutionize education and society by fostering a "critical consciousness" (Freire, 1968/2005, p. 35), a process of reflection and action through which individuals break from hegemonic cultural structures of oppression in order to realize a more equitable future (Goldbard, 2006). The foundations of CP can be traced to the educational philosophic works of Paulo Freire, particularly *Pedagogy of the Oppressed* (1968/2005), *Education for Critical Consciousness* (1973), and *The Politics of*

Education: Culture, Power, and Liberation (1985). Additional foundational texts include Willis's (1977) *Learning to Labor* and Kincheloe's (2008) *Critical Pedagogy Primer*.

Central in CP is the understanding that teaching is an inherently political act and that teaching, learning, and even our conceptions regarding what constitutes knowledge, are not neutral (Giroux, 2007). Social justice cannot be understood as independent of teaching and learning, but are inexorable intertwined (Kincheloe, 2008). As a result, CP requires an interrogation and intervention into individuals' habits of thought, reading, writing, and speaking which mediate our understanding of the world and reproduce systemic inequities (Shor, 2012). Through this process of "learning, unlearning, and relearning" (Klien, 2008, p. 79) and reflection (Milner, 2003), CP aims to individuals' critical consciousness and propel them to political action (Fritch, 2018).

As previously mentioned, CP is an extension of post-Marxist critical theory to education, specifically building on the works of Max Horkheimer (e.g. Horkheimer, 1937/1976; Horkheimer & Adorno, 1947/2002), Jürgen Habermas (e.g. 1962/1991), and others of the continental "Frankfurt School" of social theory (Held, 1980, p. 14). The term "critical" within the context of both critical theory and CP can be understood as a leveraging of Marx's (1867) extension of Kant's (1781/1999) concept of *critique*; a reflexive strategy for examining the validity of a philosophical claim and human capacity for judging the validity (Gasché, 2007). Central to both critical theory and, as a result, CP, is the notion that "ideology is the principal obstacle to human liberation" (Geuss, 1981, p. 100); our normative beliefs and values are both the product of and reproduce dominate social structures. Ideology functions to perpetuate current social systems by fostering a "false consciousness" (Freeman & Vasconcelos, 2010) in those

disenfranchised within society, justifying and normalizing the present social configuration. The aim of both critical theory and CP, therefore, is to uncover how ideology functions to produce and reproduce inequity; "to liberate human beings from the circumstances that enslave them" (Horkheimer, 1937/1976, p. 244).

Within CP, the role of the teacher is that of the transformative intellectual at the vanguard of social transformation (Gramsci, 1971), inspired by the possibilities of democracy, freedom and justice (Foley, Morris, Gounari, & Agostinone-Wilson, 2015). Within the classroom, the teacher support students' awareness of their own "incompleteness" and strive to become "more human" (Freire, 1968/2005, p. 84-85). To achieve this, the teacher must enact classroom practices which promote democratic, critical modes of teacher-student participation (Foley, Morris, Gounari, & Agostinone-Wilson, 2015). Although the teacher attends to the needs of the individual and demonstrates an appreciation for the social context (McLaren, 2005), they must also disrupt dominate notions of the isolated, atomized individual. Within CP, the teacher fosters an environment which supports students building personal connections towards larger political purposes (Foley, Morris, Gounari, & Agostinone-Wilson, 2015). The teacher must demonstrates an awareness of both their power in the classroom and reflexively negotiate this power to support students growth and learning (Foley, Morris, Gounari, & Agostinone-Wilson, 2015); self-actualization should be the goal of the teacher as well as the students (hooks, 1994).

In order to achieve this political end, it is imperative within CP that academic curriculum be re-examined and restructured (Shor, 1980). Rather than traditional curriculum which functions to disseminate static facts, CP advocates for an active

curriculum, one built around social problems and possessing the potential for abolishing passivity that characterizes school classrooms (Kliebard, 1995, 2002). Course materials should seek to center the students as researchers, generating rather than receiving knowledge (Kincheloe, 2008).

Instructional practices within CP focus on shaping students as active citizens (Foley, Morris, Gounari, & Agostinone-Wilson, 2015), inspiring students to separate themselves from acceptance of the conditions of their existence (Shor, 1980). To do so, teachers must support students in understanding the problems critical to their growth and well-being, fostering students' critical perspective and prompting them to consider whose interests this knowledge serve (Kincheloe, 2008). Although the teacher must admit that they are in a position of authority and then demonstrate that authority in their actions in support of students (Kincheloe, 2008), they also must gradually relinquish authority so students can take ownership of themselves and their learning (Shore, 1980). The teachers' role becomes that of a problem poser (Kincheloe, 2008) as students themselves more responsibility for the class (Shor, 1980) and function as self-directed beings producing their own knowledges (Kincheloe, 2008).

Democratic Education

The prominence of "justice" in teaching and teacher education might only be second to "democracy," an idea which "occupies a privileged place in the U.S. society" (Westheimer & Kahne, 2004, p. 237). This democratic ideal is founded on four pillars; 1) a political system characterized by free and fair elections, 2) active participation by the members of a society, 3) the protection of human rights, and 4) a set of laws applicable to all citizens (Diamond, 2015). Dewey (1916/2004) argues that this democratic ideal

functions at the point of contention between the common interest of all with a pluralistic society and the competing and conflicting interests of various sub-groups in preserving the status-quo. Within this "mode of associative living" (p. 91) education plays two key roles. First, an educated electorate is a necessity within a participatory government that rejects external authority (Thomas Jefferson, as cited by Wagner, 2006). Second, within a pluralistic society, education plays a significant role of elucidating the connections and interdependencies of various subgroups, the notion that there is not individual action, but that all actions have social consequences (Dewey, 1916/2004).

Parker (1996) argues that at least three different conceptions and enactments of citizenship within a democratic society are prevalent, each resulting in a starkly different understanding of educations' role in preparing individuals to participate in a pluralistic society; 1) personal responsibility, 2) participatory, and 3) justice-oriented. A personal responsibility conception of citizenship focuses on the need for individuals to demonstrate good moral character, follow the law, and solve social problems to improve society (Mann, 1838; Wynne, 1986). A participatory conception of citizenship requires the individual to take an active role in contributing to society, assuming roles which allow them to shape society rather than simple participate in it (Newmann, 1975; Barber, 1984). Finally, within a justice-oriented conception of citizenship, individuals must challenge social systems and structures that perpetuate the disenfranchisement of historically marginalized groups (Isaac, 1992, Bigelow & Diamond, 2000). In order to prepare individuals to participate in this justice-oriented conception of democratic citizenship, educational systems must prepare students to engage in informed analysis of discussion of social, political, and economic issues (Westheimer & Kahne, 2004).

The philosophic foundation for Democratic Education (DE), building on the works of John Dewey (e.g. Dewey, 1916/2004; 1938/2007), is largely grounded in the American pragmatism tradition. According to Dewey, humanism as a fundamental component of democracy must characterize science, art, education, ethics and economy. The development of democracy does not simply require more education but also a wide use of scientific methods. Democracy corresponds to a society where people can participate in its formation, where individual freedom blossoms and where there is harmonious coexistence among people. The role of education is crucial for the creation of such a democracy (Macpherson, 1994, Aronowitz, 2008). Dewey specifies the purposes of education: adults assisting students in directing their own lives through the cultivation of meaningfully educative learning experiences. Dewey's work emphasizes the importance of "learning by doing," theorizing that learning experience function on a continuum anchored on one end by those which are educative and the other by those which are mis-educative. Experiences function along this continuum according to both their immediate agreeableness and the impact on further experiences. One of Dewey's key critiques of traditional schooling is not that it is devoid of meaningful learning experiences, but rather these experiences produce negative affection or "mis-educative experience," either through the lack of immediate agreeableness or in stifling engagement with future learning experiences. It is, therefore, the educators' role to foster a learning environment, curriculum, and employ pedagogical techniques which produce the most educative learning experiences.

Core to enacting justice-oriented DE is the acknowledgement that experience is a vehicle for learning (Dewey, 1938/2007); thus, much of the teaching practices associated

with DE connect to how teachers can foster educative learning experiences. Within the learning environment, schools should connect to the broader world, rather than how traditional schools insulate students from the surrounding community and broader social context (Dewey, 1938/2007). Teachers need to cultivate and educational environment which provides continuity with the larger community (Dewey, 1938/2007), modeling and providing students opportunities to demonstrate respect for the varied voices and experiences within the classroom while also guiding students to consider ideas put forth by experts and leaders (Westheimer & Kahne, 2004). Educators should sensitize students to the diverse needs and perspectives of fellow citizens, teach students to recognize injustice and critically assess root causes of social problems, and provide students with the tools needed to change established unjust systems and structures (Westheimer & Kahne, 2004)

To support students in these educative learning experiences, learning materials should be structured so as to emphasize connections between academic content and ideas and ordinary life-experiences (Dewey, 1938/2007). In cultivating a curriculum more closely connected to the context and authentic lived experiences, teachers should adopt a curriculum which blurs the distinction between subject areas, instead focusing how different content areas connect within the context of specific issues (Lee, 2013). Additionally, teachers can employ curriculum that makes political issues more explicit while avoiding advancing a particular political perspective, conclusion, or priority, teaching about social movements and how to effect systematic change (Westheimer & Kahne, 2004).

Within DE, teacher instructional practices focus on supporting students' learning of new materials through connections to ordinary life-experience while also acknowledging that diversity of experiences necessitates understanding the complexity of students' lived experiences (Dewey, 1938/2007). Learning experiences must allow individuals to assimilate new material in a context appreciable by and beneficial to all students. Teachers must demonstrate "stewardship of best practices" (Lee, 2013, p. 25), that is, they must assume responsibility for and knowledge of the educational context in which students live. Teachers must support students in developing the necessary skills to question, debate, challenge, and change systems and structures which promote injustice and model and provide students opportunities for tackling the "root problem" rather than treat the symptoms of social injustice (Westheimer & Kahne, 2004).

Practices with Prominent Literature within Teaching and Teacher Education

Dover (2009) provides a strong theoretical foundation for understanding key teaching practices associated with various conceptions of social justice; however, this theoretical work does not help us understand the importance of each practice within the broader literature on social justice teaching within the field of teaching and teacher education. In order to address the limitation of focusing only on theoretical understandings of social justice, in this section I explore the broader body of empirical research within teaching and teacher education to better understand the importance of specific teaching practices in realizing these equitable ideals. Specifically, I looked to understand both the prevalence of each of the five theories of justice Dover (2009) articulates and explore what specific teaching practices researchers attribute to teaching for social justice.

In order to understand key practices associated with social justice teaching prominent within the empirical research in teaching and teacher education, I reviewed all research articles published in the past 10 years within the preeminent research journal in teaching and teacher education within the context of the United States and its' international counterpart; *The Journal of Teacher Education* and *Teaching and Teacher Education*. Although there exists countless other journals which may better connect to social justice education (e.g. *Equity & Excellent in Education*) or better connect to specific aspects of the adopted theoretical framework (e.g. *Journal of Curriculum Theorizing*), by grounding this review of the extent literature within teaching and teacher education and focusing on the top academic journals within this field I can better understand generally accepted practices as they relate to and are grounded in the broader field.

All articles published within the past 10 years (2008-2018) from both journals were reviewed for the present analysis. As the intent of the present review of the literature was to explore the prevalence of various social justice teaching practices within the empirical research, theoretical articles and editorials were excluded from the present study. Articles which made explicit connections to social justice, equity, inclusivity, or were explicitly theoretical grounded within one or more theory of justice in the title, abstract, keywords, or body of the article were selected for further analysis. A total of 67 manuscripts were identified with the *Journal of Teacher Education* and 112 within *Teaching and Teacher Education*. Articles were then reviewed and cataloged as to either explicitly identifying teaching practices associated with teaching for social justice or not Of the 179 articles, 131 explicitly identified social justice teaching practices; 41 within

the *Journal of Teacher Education* and 82 within *Teaching and Teacher Education*. Of the 44 social justice articles not included in the present study, some addressed issues of equity and inclusion at the policy level, focused exclusively on implications for teacher education, or otherwise did not include specific teaching practices associated with teaching for social justice. In this section, I explore the various practices associated with teaching for social justice connected with each of domains of my theoretical framework: 1) the learning environment, 2) curriculum, and 3) pedagogy. I present a table of articles by social justice teaching attribute within each domain in Appendix B.

Learning Environment

Contemporary research within the field of teaching and teacher education suggests that educators must attend to several different facets of the learning environment to realize their equitable ideals. This includes 1) attending to how they structure the physical space, 2) how they provide opportunities for students to explore and perform their identities, 3) how they foster an atmosphere of care and respect, and 4) how they allow students to express agency within the classroom.

Physical space. One key attribute of teaching for social justice within the learning environment domain was the physical layout of the classroom. In order to address systemic inequities, teachers must attend to the influences that various attributes of the physical learning spaces and communities has on student learning and engagement (Turner & Drake, 2016), particularly as they continue to struggle with how the learning environment contributes to perpetuating multi-dimensional issues within equity-focused education (Pollock, Deckman, Mira, & Shalaby, 2010) and perpetuates complacency in inequity (Haviland, 2008). There are several aspects of the learning environment that

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indicate teaching for social justice, including the decorations in the classroom and the physical arrangement of students in the space.

One key indicator of teaching for social justice related to the physical attributes of the learning environment is in who and what is portrayed in the classroom on posters and bulletin boards. Teachers must embrace academic spaces that liberate and create opportunities through the inclusion of diverse representations and student work instead of limiting and closing down the diversity of human experiences by including only dominate portrayals (Malins, 2016). One way educators can do so is by using the physical spaces of the classroom, such as the classroom walls, as a sight for students to bring their experiences and their words into the classroom, incorporating aspects of the broader social content into the physical attributes of the learning environment (Consalvo & David, 2016).

Another key indicator is in how students are arranged in the physical space. Given the importance of student-centered learning, and that there is often limited opportunities for students to engage in such practices (particularly students from historically marginalized communities), the classroom ought to be student-centered (Rubin, Abu El-Haj, Graham, & Clay, 2016), arranged in such a way as to facilitate peer interaction (Baskerville, 2009). Educators can also design learning environments that, while allowing each child to do rigorous academic work, also affords equitable access to learning through the physical layout of classrooms, materials available, and the ways of organizing participation (Dutro & Cartun, 2016).

Student identity. Another key attribute of teaching for social justice is facilitating an inclusive learning environment by creating space for students to explore and perform

their socially complex identities (Powers & Duffy, 2016; Vavrus, 2009), predicated on the notion that people experience the world differently (Milner, 2010). Teacher should understand that school demands can lead to tension between the requirements of the academic environment and students' communities and find ways in which to saturate dominate forms of knowledge with new meaning so there is space for students to retain a sense of themselves (Gale, Mills, & Cross, 2017). Key indicators related to providing this space include acknowledging differences, honoring students' experiences, challenging stereotypes and dominate discourses, creating a gender-inclusive classroom, and modeling and providing students opportunities to engage in reflexive practices.

One key indicator of creating a space for students to perform social complex identities is to acknowledge cultural and individual differences in the classroom. Rather than shy away from differences, teachers need to acknowledge the racial and ethnic background of students and teachers (Milner, 2010; Ross & Chan, 2008), attend to the social complexities of the students they serve (Yogev & Michaeli, 2011; Skerrett, 2008), and see their students a holistic manor (Pantić, 2017). Key in this is that teachers acknowledge and demonstrate understanding and respect for cultural differences (Milner, 2010; Irvine, 2012). Teachers must promote respect for diversity in the classroom (Kumar & Hamer, 2012), attend to the social construction of identity (Bekerman & Zembylas, 2014), and acknowledge that all students bring valued beliefs and experiences to the learning environment and these are a valued part of the learning process (Gale, Mills, & Cross, 2017). They should recognize multiple forms of discourse and language as a resource (Lee, Kim, Kim, & Lim, 2018) and acknowledge and validate students' ways of expressing their knowledge of the world (Gale, Mills, & Cross, 2017).

Another key indicator is challenging stereotypes and dominate discourses regarding historically marginalized groups. Teachers must challenge prevailing images and disrupts conventional stereotypes (Cushman, 2010; Shelton & Barnes, 2016), acknowledging the social, political, and historical practices of discrimination that affect students (Hale, Snow-Gerono, & Morales, 2008). They ought to avoid passing judgement on students and avoid dominate deficit discourses, rejecting structural and cultural explanations for student "underachievement" (Allen, 2015) while challenge meritocratic ideologies which fail to account for the socio-political realities of students (Alviar-Martin & Ho, 2011). Additionally, educators should challenge dominate discourses, particularly in relation to cultural differences in behavioral expectations (Milner, 2010; Irvine, 2012) and beliefs about schools (Shapira-Lishchinsky, 2016). These perceived deficits are cultural constructions rather than attributes of individual students (Collins, 2013), and students' cultural practices which are not part of the dominate culture should not be devalued (van Tartwijk, den Brok, Veldman, & Wubbels, 2009).

A third key indicator of fostering a space for students' to explore and perform their socially complex identities is honoring students' lived experiences and existing attitudes (Conklin & Hughes, 2016). Teachers should acknowledge and respect the cultural resources and knowledges students already possess, using this resources to develop and design instruction (Rueda & Stillman, 2012). Teachers should create a classroom environment that is warm and demanding, affirming and sustaining their students' cultural background knowledge by drawing from their knowledge of language, history, and cultural (Whipp, 2013). Teachers must recognize the social-political and material reality of students (Bowman & Gottesman, 2017) and acknowledge the

challenges students face (Alviar-Martin & Ho, 2011) and reject deterministic beliefs about fixed ability and the associated idea that the presence of some will hold back the progress of others (Spratt & Florian, 2015).

Another indicator is fostering a gender-inclusive classroom setting (Cushman, 2010; Bartholomaeus, Riggs, & Andrew, 2017; Schmidt, Chang, Carolan-Silva, Lockhart, & Anagnostopoulos, 2012), where students are not forced into dichotomous gender identities and are instead provided opportunities to explore gender category and gender transgression oppression (Rands, 2009) and are encouraged to challenge gender norms and stereotypes in the classroom (Andersson, Hussenius, & Gustafsson, 2009). The teacher should respect and allow students to adopt preferred gender pronouns (Bartholomaeus, Riggs, & Andrew, 2017).

Finally, teachers should model and provide students opportunities to engage in reflexive practices, exploring their own identity construction and how the influences how the interact with the diverse students they serve (McDonough, 2009; Leonard, Brooks, Johnson, & Berry, 2010; Matias & Grosland, 2016). Teachers must create an environment for learning with opportunities that are sufficiently made available for everyone, so that all learners are able to participate in classroom life (Spratt & Florian, 2015).

Care and Respect. Teachers must also foster an atmosphere of care and respect within the learning environment (Téllez, 2008; James, 2012), attending to students' socio-emotional well-being (Sondel, Baggett, & Dunn, 2018; Pantić & Wubbels, 2012; Pantic, 2017) and supporting the ideas of social justice, tolerance, and openness (Mäkinen, 2013). Key indicators of fostering care and respect in the learning environment

include modeling and supporting students in the use of inclusive language and communication, teachers investing in meaningful relationship with students, creating space for emotions in the classroom, and exercising fair classroom management strategies.

One key indicator of fostering an atmosphere of care and respect is modeling and supporting students' use of inclusive language and communication. Teachers can foster an inclusive atmosphere through modeling inclusive behavior and usage of inclusive language (Clark, 2010; Spratt & Florian, 2015). Teachers should also model and provide students opportunities for cross-cultural communication (Coffey & Farinde-Wu, 2016), facilitating students' discussion of contrary ideas and points of view with respect and empathy (Brownlee, Scholes, & Walker, 2016) while providing supports to encourage positive peer-to-peer interactions, particularly integrating diverse experiences (Schoorman & Bogotch, 2010). Teachers must model a culture of caring and develop a collaborative learning community in which all individuals are respected and contributing (Coffey & Farinde-Wu, 2016; Conklin & Hughes, 2016; Dunkake & Schuchart, 2015). The teacher should create a learning-focused, respectful, and supportive learning environments (Cochran-Smith, Ell, Grudnoff, Haigh, Hill, & Ludlow, 2016), creating opportunities for students to engage in equitable and intellectually challenging learning (Conklin & Hughes, 2016).

A second indicator is educators fostering meaningful relationships with their students. These relationships should extend beyond curriculum (Baskerville, 2009; van Tartwijk, den Brok, Veldman, & Wubbels, 2009; Reagan, Chen, & Vernikoff, 2016; Pantic & Wubbles, 2012; Milner, 2008; Lynch & Fisher-Ari, 2017; Conner, 2010;

Skerrett, 2008), and involve listening to and respecting the personal experiences of students (Adler, 2011; Pantić, 2017). Educators should affirm students' cultural identities (Young, 2010), and take an interest in students' out-of-school lives (Shapira-Lishchinsky, 2016). The teacher should model respect, moral reasoning (Brownlee, Scholes, & Walker, 2016) and inclusive behavior (Robinson & Ferfolja, 2008).

A third indicator of fostering an atmosphere of care and respect is creating a space for emotions in the classroom. Educators should model and provide students opportunities to experience a wide range of emotions in the classroom (Zeichner, Bowman, Guillen, & Napolitan, 2016). Teacher should also be emotionally present and engaged with students (Matias & Grosland, 2016), and demonstrate empathy for students' emotions (Boylan & Woolsey, 2015).

Finally, utilizing equitable classroom management strategies, particular in response to violence against students from historically marginalized groups, is another key indicator of fostering an atmosphere of care and respect. Teachers must address negative peer interactions, attending to the homophobic, ablest, sexist, racist, and other root causes of issues such as bullying (Schmidt, Chang, Carolan-Silva, Lockhart, & Anagnostopoulos, 2012) The teacher must monitor how students position each other (Lee, Kim, Kim, & Lim, 2018) and address the use of discriminatory language with students (Nixon, 2010), correcting language which creates a hurtful environment (Schmidt, Chang, Carolan-Silva, Lockhart, & Anagnostopoulos, 2012). In doing so, the teacher should engage in restorative justice and conciliation practices rather than persecution, incrimination, and confrontation (Perumal, 2015).

Agency. Teachers must also allow students to be active agents in their own learning in order to foster an inclusive learning environment. Teachers must be prepared to learn from students, adapt learning to meet the needs of their students, be inclusive of students' experiences, attend to the voices and stories students share, instill a community of success within the classroom, and encourage students to share knowledge with others while attending to social inequality (Young, 2010), promoting both individual and collective advocacy (Peters & Reid, 2009). Key indicators of allowing students agency in the learning environment include using student-centered and collaborative learning strategies and providing students a meaningful role in the classroom.

One key indicator of allowing students to be active agents in their own learning is in using student-centered and collaborative learning strategies. Teachers should provide opportunities where they can learn from, not just teach, students (Gale, Mills, & Cross, 2017; Dutro & Cartun, 2016), facilitating student engagement with peers other adults, and experts (Dare & Nowicki, 2018) and real, meaningful issues (Mirra & Morrell, 2011). Teachers should foster collaborative environment in the classroom (Kumar & Hamer, 2013), engaging students in collaborative and collective problem-based learning (Mirra & Morrell, 2011; Mäkinen, 2013).

An additional indicator of allowing students to be active agents in their own learning is providing students an active role in the learning process. Teachers need to work with rather than "on" students (Gale, Mills, & Cross, 2017), providing students significant and meaningful rolls in the classroom (Boylan & Woolsey, 2015). Students should have opportunities to lead and actively engage in learning (Rubin, Abu El-Haj, Graham, & Clay, 2016), having opportunities and responsibilities for the tenor of

classroom atmosphere (Rubin, Abu El-Haj, Graham, & Clay, 2016). The teacher should

establish classroom norms for participation (Lee, Kim, Kim, & Lim, 2018), fosters

inclusive atmosphere (Mäkinen, 2013) and classroom context where students are treated

as capable of producing their own knowledge (Milner, 2008). The teacher should create

an environment in which students feel safe in taking risks in learning and are values

intellectually thinking and creativity (Dare & Nowicki, 2018).

Curriculum

In addition to realizing social justice through various facets of the learning

environments, teachers can also realize their equitable ideals through curriculum. If

necessary, teachers should augment approved curriculum with outside resources to meet

these equitable aims (Young, 2010). Within the contemporary literature in teaching and

teacher educations, teachers can do so through two ways; 1) selecting a curriculum which

is inclusive of the diversity in their classrooms and 2) connects to meaningful social

issues.

Inclusive curriculum. In order to better meet the needs of the diverse students

they serve, teachers should aim to adopt a curriculum that is reflective of the diversity

present in their classroom and broader social context (Vavrus, 2009; Hachfeld, Hahn,

Schroeder, Anders, & Kunter, 2015; Peters & Reid, 2009; Agarwal, Epstein, Oppenheim,

Oyler, and Sonu, 2010; Wager & Foote, 2013; Bartholomaeus, Riggs, & Andrew, 2017;

Coffey & Farinde-Wu, 2016; DePalma & Atkinson, 2010). Key indicators of reflective

curriculum include materials that include diverse representations, particularly of

individuals from historically marginalized communities, and the use of materials that are

free of stereotypical portrayals.

One key indicator of an inclusive curriculum is the presence of diverse representations, particularly of individuals from historically marginalized communities. Such curriculum should highlight diversity and reject discourse of sameness (Timberlake, Thomas, & Barrett, 2017) and be reflective of the diverse students in the classroom and broader community (Sharkey, Olarte, & Ramirez, 2016; Skerrett, 2008). Texts should use language which is inclusive of all students (Uzum, 2013), and is rich, engaging, and compelling (Whipp, 2013, Dover, Henning, Agarwal-Rangnath, 2016), and include worthwhile content such as complex portrayals that challenge overly simple dominate discourse (Cochran-Smith, Ell, Grudnoff, Haigh, Hill, & Ludlow, 2016)

Another key indicator of an inclusive curriculum is the absence of stereotypical depictions of individuals from historically marginalized communities. The curriculum ought to reflect diversity of experiences while not producing historically marginalized groups as "the other" (Røthing, 2017). Texts should also address issues central to historically marginalized groups (Schmidt, Chang, Carolan-Silva, Lockhart, & Anagnostopoulos, 2012), while avoiding negative depictions and stereotypes (Macgillivray & Jennings, 2008).

Social Issues. In addition to being inclusive, the curriculum should also connect to important social issues such as integrating multiple perspectives and questions dominate Western narratives (Agarwal, Epstein, Oppenheim, Oyler, and Sonu, 2010). Key indicators of a curriculum that addresses these social issues includes materials that connect to challenges students face and curriculum that challenges dominate cultural ideals.

One key indicator of a curriculum that addresses social issues are learning materials that connect to the challenges students face. Curriculum that addresses social issues should include depictions of such challenges, addressing issues central to historically marginalized groups (Schmidt, Chang, Carolan-Silva, Lockhart, & Anagnostopoulos, 2012), such as systemic injustice and histories of violence against historically marginalized communities. Such materials provide students from historically marginalized communities language to connect with their challenges and students from dominate groups opportunities to better understand system inequities (Alviar-Martin & Ho, 2011)

A second indicator of a curriculum that connects to social issues is learning materials that challenge dominate discourses. Teachers should use curriculum that questions categories, identities, and groups (Schmidt, Chang, Carolan-Silva, Lockhart, & Anagnostopoulos, 2012). Coursework should recognize the diversity of students' backgrounds and experiences (Gale, Mills, & Cross, 2017) and enabling critical engagement with other forms of knowledge that are often considered outside the scope of traditional educational settings (Gale, Mills, & Cross, 2017). Materials should identify and challenging hegemonic discourses (Peters & Reid, 2009; Robinson & Ferfolja, 2008), cultural ideals (Schoorman & Bogotch, 2010), and the social construction of identity (Dutro & Cartun, 2016). Teachers should think critically about the role of specific activates and critically use curriculum for acquiring particular knowledge of practice (Turner & Drake, 2016) while communicating caring (Rojas & Liou, 2017).

Pedagogy

Finally, research within teaching and teacher education suggests that there are several ways in which teachers can enact social justice through their pedagogical practices. This includes 1) connect content to students' lives, 2) providing students opportunities for critical engagement, 3) use high quality teaching practices, and 4) hold all students to high academic standards.

Students' lives. One way in which teachers can enact social justice through their pedagogical practices is by making meaningful connections between curriculum and students' lives. Instruction is always conducted within the context of larger social systems, structures, and hierarchies (Dutro & Cartun, 2016). Teachers should demonstrate an understanding of this context, be able to identify how cultural differences might impact learning behaviors, and know how classroom interaction and instruction can be changes to embrace those differences (Kidd, Sanchez, & Thorp, 2008). Key indicators of making meaningful connections between curriculum and students' lives are demonstrating knowledge and value of students' lives and community, using students' cultural resources to aid in learning, and using pedagogical practices that sustaining students' culture.

One key indicator of making meaningful connections between curriculum and students' lives is demonstrating knowledge and value of students' lives and community. Teachers should learn about and value students' diverse cultures experiences and demonstrate their value for this diversity by using this knowledge as the foundation for curriculum (Skerrett, 2008). Teachers should consider the demographic, religious, and sociopolitical context of the community in which they teach (Shapira-Lishchinsky, 2016)

and use this knowledge to integrate activities which connect students' prior knowledge from their home and broader community to academic concepts (Teemant, Wink, & Tyra, 2011; Ross & Chan, 2008; Schoorman & Bogotch, 2010).

A second key indicator of making meaningful connections between curriculum and students' lives is using students' cultural resources to aid in learning. Teachers should attend to the cultural realities of their students by formulate learning experiences that reflect their students' sociocultural worlds (Bleicher, 2011; Brown & Weber, 2016), leveraging students' cultural and linguistic resources to connecting academic content to students (Buxton, Salinas, Mahotiere, Lee, & Secada, 2013; Wager & Foote, 2013; Brayko, 2013; Aguirre, Turner, Bartell, Kalinec-Craig, Foote, McDuffie, & Drake, 2013; Dyches & Boyd, 2017; Joves, Siques, & Esteban-Guitart, 2015; Jovés, Siqués, & Esteban-Guitart, 2015; Lee, Kim, Kim, & Lim, 2018), and providing opportunities to address real and personal issues through content (Corbett, 2010; Yogev & Michaeli, 2011). They should adjust pedagogical practices to meet the unique needs of the diverse students teachers serve (Milner, 2010; Coffey & Farinde-Wu, 2016; Hachfeld, Hahn, Schroeder, Anders, & Kunter, 2015; Heydon & Hibbert, 2010) and build on students' interests (Shapira-Lishchinsky, 2016; Jovés, Siqués, & Esteban-Guitart, 2015). Teachers should explicitly connect content to students' lives (Garri & Appova, 2013; Adair, 2008; Young, 2010; Adler, 2011; Blanchet-Cohen & Reilly, 2013; Boylan & Woolsey, 2015; Cochran-Smith, Ell, Grudnoff, Haigh, Hill, & Ludlow, 2016), using examples which are personally meaningful to students (Gay, 2010a) and integrate learning with students' broader community (Zeichner, Bowman, Guillen, & Napolitan, 2016; Buxton, Salinas, Mahotiere, Lee, & Secada, 2013; Wager & Foote, 2013; Brayko, 2013; Aguirre, Turner,

Bartell, Kalinec-Craig, Foote, McDuffie, & Drake, 2013; Dyches & Boyd, 2017; Jovés, Siqués, & Esteban-Guitart, 2015; Lee, Kim, Kim, & Lim, 2018). Teachers should shift pedagogical thinking away from what works for most learners (along with something additional or different for some learnings) towards creating opportunities in which all learners are able to participate (Moscardini, 2014).

A third key indicator of making meaningful connections between curriculum and students' lives is using pedagogical practices that sustaining students' culture. That is, teachers should utilize pedagogical practices that support students' continued understanding and appreciation of their unique community and broader social context (Kidd, Sanchez, & Thorp, 2008). Teachers should recognize, support, and sustain students' cultural practices by focusing on such outcomes as not only a tool to aid in learning, but as a valued outcome in itself (Mellom, Straubhaar, Balderas, Ariail, & Portes, 2018; Kidd, Sanchez, & Thorp, 2008; Jovés, Siqués, & Esteban-Guitart, 2015; Mellom, Straubhaar, Balderas, Ariail, & Portes, 2018; Skerrett, 2008).

Critical engagement. Second, teachers can enact social justice by providing students opportunities for critical engagement. As discussed in the previous section, critical in this context refers to Marx's adoption of Kant's notion of critique rather than the more colloquial used notion of critical thinking. In order to provide students opportunities to engage in critical thought, teachers must first acknowledge that not all students have equal opportunities and that student performance is, in part, a factor of mismatch cultural expectations and this inequality in opportunities (Milner, 2010). Teachers should incorporate issues of race and ethnicity into their teaching practices (Adler, 2011; Lee, Kim, Kim, & Lim, 2018) and attend to the disconnect between

traditional teaching techniques and materials and dominate, hegemonic discourses (Harman, Ahn, & Bogue, 2016). Teachers should use their authority for critical and transformative purposes (Abednia, 2012), fostering opportunities for students to develop critical consciousness (Sondel, Baggett, & Dunn, 2018), apply learning to the issues they face (Yogev & Michaeli, 2011) and leverage curriculum to help students make meaningful changes (Blanchet-Cohen & Reilly, 2013; Whipp, 2013; Rojas & Liou, 2017; Brownlee, Scholes, & Walker, 2016; Garri & Appova, 2013; Garii & Rule, 2009). Key indicators of providing students opportunities for critical engagement include modeling and providing students opportunities to discuss systemic injustice, identify and address traditional practices which perpetuate systemic inequities, and question their own assumptions.

One key indicator of providing students opportunities for critical engagement is modeling and providing students opportunities to discuss systemic injustice. Teachers should make explicate connections to injustice rather than just discussing diversity (Garii & Rule, 2009), preparing students to question structural inequality (Young 2010) and creating opportunities for students to critique dominate discourses (Jones & Hughes-Decatur, 2012; Dyches & Boyd, 2017; Jones & Hughes-Decatur, 2012; Clark, 2010; Nixon, 2010; Peters & Reid; Schoorman & Bogotch, 2010; Garii & Rule, 2009; Farnsworth, 2010; Teemant, Leland, & Berghoff, 2014). Additionlly, teachers should support students in understanding and redressing historical and contemporary examples of injustice (Whipp, 2013; Garri & Appova, 2013; Rodriguez & Cho, 2011; Teemant, Leland, & Berghoff, 2014; Walton, Priest, Kowal, White, Brickwood, Fox, & Paradies, 2014; Adler, 2011).

A second key indicator of providing students opportunities for critical engagement is modeling and providing students opportunities to identify and address traditional practices which perpetuate systemic inequities. In addition to addressing broader social issues, teachers help students understand how the structures of school reproduce systemic inequalities (Cochran-Smith, Ell, Grudnoff, Haigh, Hill, & Ludlow, 2016). Students should be provided with opportunities to critically engage course materials and dominate knowledges and assumptions do not go unchallenged (Gale, Mills, & Cross, 2017). Teachers need to challenge and provide students opportunities to critique instructional practices that maintain racial and socioeconomic privilege (Heydon & Hibbert, 2010) and policies and institutional practices which perpetuate systemic inequity (Hyland & Heuschkel, 2010; Cochran-Smith, Ell, Grudnoff, Haigh, Hill, & Ludlow, 2016). Teachers should provide students resources to redress unjust educational systems (Gale, Mills, & Cross, 2017) and disrupt traditional expectations of student competence (Louie, 2016).

A third key indicator of providing students opportunities for critical engagement is modeling and providing students opportunities to question their own assumptions. Teachers should models and provides students opportunities to engage in reflexive practices (Sockman & Sharma, 2008), engaging students in developing a critical lens to balance monocultural lens (Moss, 2008), support the development of a sociopolitical disposition (Lee, Kim, Kim, & Lim, 2018), and cultivate students' civic capacities (Sondel, Baggett, & Dunn, 2018) for engaging contemporary social issues (Milstein, 2010). To do so, teachers should provide students space and opportunity to address controversial social issues and topics (Gindi & Erlich, 2018), empowering students to

transform society's inequities through democracy and civic engagement (Teemant, Leland, & Berghoff, 2014) and scaffold opportunities for active participation in democracy through civic engagement and deliberative discussion (Agarwal, Epstein, Oppenheim, Oyler, and Sonu, 2010).

High quality. Teachers should openly acknowledge that educational systems produce inequitable outcomes (Gale, Mills, & Cross, 2017) while also providing students from historically marginalized communities access to academic "languages of power" (Philip, 2011), training students in rigorous and relevant traditional academic skills (Dover, Henning, Agarwal-Rangnath, 2016). Teaching for social justice also necessitates that all students have access to high quality education (Chubbuck, 2010); therefore, teachers should leverage high-quality pedagogical practices. Key indicators of using high quality teaching practices include setting all students up for success, using constructivist teaching practices, adopting student-centered learning strategies, and implementing research supported high impact teaching practices.

One key indicator of high quality teaching is setting all students up for success. Teachers should foster fairness through educational opportunities (Rojas & Liou, 2017) and the use high-quality pedagogical practices (Boylan & Woolsey, 2015) while working with students, parents, and colleagues to support student learning and engagement (Lai, Li, Ji, Wong, & Lo, 2016). Teachers should use pedagogical strategies ensuring equitable access to the course content (Garri & Appova, 2013). Teachers should position students as capable (Lee, Kim, Kim, & Lim, 2018), encourages and supports success (Jordan, Schwartz, & McGhie-Richmond, 2009; Lee, Kim, Kim, & Lim, 2018), cultural competence, and critical consciousness (Leonard, Brooks, Johnson, & Berry, 2010).

Teachers should identify and build on student strengths (Rubin, Abu El-Haj, Graham, & Clay, 2016) rather than focus on their perceived deficits (Gale, Mills, & Cross, 2017), rejecting deterministic views (Florian, 2012) and seeing the difficulties students experience in learning as dilemmas for teaching, not problems within students (Florian, 2012; Cochran-Smith, Ell, Grudnoff, Haigh, Hill, & Ludlow, 2016).

A second key indicator of high quality teaching within the context of teaching for social justice is using constructivist teaching practices. Teachers should provide opportunities for children to participate in co-construction of knowledge (Spratt & Florian, 2015; Spratt & Florian, 2015; Teemant, Leland, & Berghoff, 2014) and engaging higher order thinking (Brownlee, Scholes, & Walker, 2016; Jordan, Schwartz, & McGhie-Richmond, 2009). Educators should encourage students to discover new learning beyond the normal acquisition-of-knowledge level (Dare & Nowicki, 2018), positioning students as knowledge-generators, not just knowledge consumers (Dutro & Cartun, 2016). Teachers should adopt an inquiry stance (Cochran-Smith, Ell, Grudnoff, Haigh, Hill, & Ludlow, 2016; Gorski, 2009), integrating problem-solving strategies into their lessons (Hachfeld, Hahn, Schroeder, Anders, & Kunter, 2015) and providing students opportunities to grapple with problems themselves rather than simply offer solutions (Brownlee, Scholes, & Walker, 2016). The teacher should designs, enacts, and collaborates actives that generate language expression and development of content vocabulary and assists student language use or literacy development through questioning, rephrasing, and modeling (Teemant, Wink, & Tyra, 2011).

A third key indicator of high quality teaching is adopting student-centered learning strategies. Teachers should engage students in a sustained, student-dominated,

goal directed academic conversation (Teemant, Leland, & Berghoff, 2014; Dutro & Cartun, 2016; Lai, Li, Ji, Wong, & Lo, 2016), designing and implementing learning opportunities aligned to valued learning outcomes (Cochran-Smith, Ell, Grudnoff, Haigh, Hill, & Ludlow, 2016). Teachers should disrupt "tyrannical teacher-directed practices" (Miller, 2009, p. 914) and instead focus on student-centered pedagogical practices (Leonard, Brooks, Johnson, & Berry, 2010; Louie, 2016). Students should have opportunities to work independently and in groups to form knowledge (Blanchet-Cohen & Reilly, 2013) with the teachers' role to act as a facilitator of classroom discussion (Dutro & Cartun, 2016). Teachers should avoid grouping students into "ability groups" and instead provides rich learning opportunities and student-directed instruction for all individuals (McGillicuddy & Devine, 2018; Spratt & Florian, 2015; Gomez-Zepeda, Petrenas, Sabando, & Puigdellivol, 2017) while supporting all students in making positive contribution to the class (Lai, Li, Ji, Wong, & Lo, 2016).

Finally, a fourth key indicator of high quality teaching within the context of teaching for social justice is implementing research supported high impact teaching practices. These practices include good time-management (Jordan, Schwartz, & McGhie-Richmond, 2009) and attend to students' academic thinking (Lee, Kim, Kim, & Lim, 2018; Young, 2010). Additionally, teachers should differentiate instruction through choice of activity for everyone (Spratt & Florian, 2015) and support student autonomy (Williamson, 2017). Teachers should extend what is ordinarily available for all learners rather than using teaching and learning strategies that are suitable for most alongside something "additional" or "different" for some who experience difficulties (Spratt & Florian, 2015). In general, educators should use evidence of learning to scaffold learning

and improve teaching (Cochran-Smith, Ell, Grudnoff, Haigh, Hill, & Ludlow, 2016; Jordan, Schwartz, & McGhie-Richmond, 2009).

High expectations. Finally, teachers should hold all students to high academic expectations while attending to the social and political landscape (Reagan, Chen, & Vernikoff, 2016; Milner, 2010; Whipp, 2013; Tellez, 2008; Skerrett, 2008). Teachers should treat all students as capable learners who are entitled to high-quality instruction and feedback (Washburn-Moses, 2013). Key indicators of holding students to high expectations include providing equal feedback, focusing on mastery goals, and attending to students experiences.

One key indicator of holding students to high expectations is providing equal feedback to all students. Teachers should move past providing equality in their support and feedback necessary for all students to be successful (Milner, 2008). They should acknowledge that there are multiple ways to acquire and demonstrate knowledge, be mindful to apply curriculum to real life circumstances, teaching students to be metacognitive (Young, 2010).

A second key indicator of holding students to high expectations is focusing on mastery rather than performance goals (Kumar & Hamer, 2013) and provide performance feedback and assists the development of more complex thinking (Teemant, Wink, & Tyra, 2011; Teemant, Leland, & Berghoff, 2014; Spratt & Florian, 2015). Focusing on mastery goals involves orienting students towards understanding materials rather than emphasizing performance on specific tasks such as tests or assignments.

A third key indicator of holding students to high expectations is attending to students experiences. Teachers hold students to high academic expectations to promote

students' histories, self-respect and preparation for a more just future (Rojas & Liou, 2017). Teachers should recognize that student academic difficulties are a function of environment, opportunity, cultural, or linguistic disconnect (Cheatham, Jimenez-Silva, Wodrich, & Kasai, 2014).

Summary and Discussion

Several practices associated with teaching for social justice emerge across both the theoretical and empirical scholarship in teaching and teacher education. Within the context of how educators foster an inclusive learning environment, both the degree to which educators foster a caring and respective atmosphere and the degree to which they provide a space for students to perform their diverse and complex social identities were prominent within the research published in the Journal of Teacher Education and Teaching and Teacher Education. These findings correspond with theoretical work on social justice teaching, particularly Social Justice Education (SJE), Culturally Responsive Pedagogy (CRP), and Multicultural Education (MCE), all of which emphasize the importance on educators developing deep personal relationships with their students and respect the diversity of experiences present in the classroom. Less prominent, though still present, educators should foster a learning environment in which students are active agents rather than passive participants. This echoes tenants of both Critical Pedagogy (CP) and Democratic Education (DE), both of which focus on providing students opportunities for engagement and shared leadership. Finally, the research in teaching and teacher education suggests that educators need to attend to the physical attributes of the learning environment to promote equality. This aligns with DE, which theorizes that the

learning environment should be reflective of the broader community and SJE, which calls on teachers to build inclusive learning communities.

Educators can also enact social justice through the curriculum they select, develop, and enact. Research in teaching and teacher education suggests that curriculum should be reflective of the diversity within the broader community and address important social issues. These attributes of the curriculum align with each of the prominent theories of justice, as SJE, CRP, MCE, CP, and DE all express the importance of inclusive and social engaged curriculum.

Finally, there are several aspects of teachers' pedagogical practices related to teaching for social justice. First, the research highlights that teachers must be responsive to their students, meaningfully connecting learning objective and course content to students' lives. Although this aligns with several theories of justice, it reflects the core tenants of CRP, which focuses on how teachers can teach culturally responsively. Additionally, educators should model and provide students' opportunities to critique dominate discourses as part of their pedagogical practices. This echoes aspects of CRP, CP, and MCE, all of which highlight the importance of attending the implicit messaging present within the curriculum through pedagogy. Finally, social justice teaching requires educators to be exceptional teachers, leveraging high-quality teaching practices and providing even feedback. This relates to Ladson-Billings' (1995) articulation that social justice teaching is good teaching specifically for students from historically marginalized groups.

The prevalence of these practices within the empirical research within teaching and teacher education and correspondence and concurrence with various theoretical

conceptions of social justice teaching suggests that there are some common research supported and theoretically sound social justice teaching practices which could be evaluated within the classroom. By selecting only those practices identified within prominent research journals within the field of teaching and teacher education, the prevalence of these practices suggests a degree of consensus regarding the relation of these practices and teaching for social justice. Similarly, the correspondence of these practices and those articulated within prominent theories of teaching for social justice suggest that these practices are both theoretically justifiable and have strong empirically support.

In the next chapter, I outline the methodological approach for triangulating these practices with locally meaningful social justice teaching practices and the process for developing these locally valued, research supported, and theoretically sound social justice teaching practices into a formative assessment instrument. I then outline the method for evaluating the content validity and content value of these attributes and establishing the reliability of the formative assessment instrument. Additionally, I introduce the post-qualitative methodology I use to attend to the philosophical limitations of this assessment development process.

CHAPTER III

METHODS

The literature review discussed in Chapter II highlights the fact that there are numerous teaching practices that function as important attributes of teaching for social justice. Given this fact and the highlighted need for an assessment instrument that provides educators structured feedback on the inclusion of such practices in their classroom as outlined in Chapter I, it is both necessary and possible to develop an assessment instrument based on research supported and locally valued teaching practices – the Teaching for Social Justice Formative Assessment (TSJFA). However, as also acknowledged in Chapter I and noted by Dover (2009), there exists significant philosophical limitations to such an assessment instrument. Thus, the realization of social justice in the classroom is situated within the paradoxical need and limits of a social justice formative assessment.

In order to attend to this incommensurability, the present study simultaneously palpitates social justice both through the "old" and "new" empiricisms (e.g. St. Pierre, 2016; St. Pierre, Jackson, & Mazzei, 2016), or by orienting this research project towards both the *royal* and the *minor science*[3] of teaching for social justice. As outlined in Chapter I, Deleuze and Guattari (1980/1987) offer *cartography* as a framework for conceptualizing that rejects fixity and "Truth" in favor of contingent, situated, and dynamic knowledge. The use of cartography within the present study, maps social justice not only for its scientific function but also through philosophic dimensions to rethink the philosophical limitations of assessing teacher classroom practices. This dual mapping

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[3] Key philosophical terms are emphasized in italics the first time they are presented in each chapter and are defined in Appendix A.

better captures the phenomenon, providing additional clarity or understanding of social justice. That is to say, the aim of these concurrent analyses is not to triangulate a more complete understanding social justice through the identification of points of connection and conjunction; rather, the study's aim is to overlay the results of these analyses to highlight the uneven topography of social justice in teaching and teacher education.

Towards that end, I first engage social justice teaching through traditional analytic tools built on classical test theory and the psychometric assessment development methods outlined by Crocker and Algina (2008) and the American Education Research Association, American Psychological Association, and the National Council on Measurement in Education (AERA, APA, & NCME, 1999) to develop the TSJFA. Concurrently, in order to attend to the limitations of distilling teaching for social justice into a set of discrete, measurable classroom behaviors, I leverage the philosophic works of Giles Deleuze and Felix Guattari (1980/1987), using their concept of a "*perceptual semiotics*" (Adkins, 2015, p. 1) as a divergent point of entry to this research project (Lenz Taguchi & St. Pierre, 2017). This overarching cartographic structure allows for the concurrent consideration of the varied analyses from both subsections. Instead of the exclusive disjunctive synthesis ("either/or"), this study aims to realize the radical schizophrenic disjunction "either…or…or…" (Deleuze & Guattari, 1972/1977, p. 12) that allows for the permutation of difference. Thus, this project is less synthetic in nature, but instead overlays the results of both analyses. Points of contention that highlight where the various analyses become incommensurate are explored in Chapter V, allowing for further consideration of these issues.

The remainder of this chapter is divided into two sections. First, using traditional psychometric techniques as a mode of scientific inquiry, I outline the methods and methodologies employed during the assessment development process. Second, I articulate how I leverage Deleuze and Guattari's (1980/1987) concept of "perceptual semiotics" (Adkins, 2015, p. 1) as a divergent framework for *mapping* the function of the assessment development process. In each of the methods sections, I ground the research design within the specific traditions upon which each analysis is founded. I then address the specific methods and methodologies employed at various phases of the research project. Finally, I summarize each methods section in addition to providing a summary for the present study's overarching structure.

Assessment Development Methodology

Following the psychometric assessment development guidelines outlined by Crocker and Algina (2008) and AERA, APA, & NCME (1999), the present study is broken down into three phases in order to answer the first research question: can a formative assessment instrument be developed that is a sufficiently reliable and valid measure of pre-service and in-service teacher's engagement in specific research-supported and locally valued social justice classroom behaviors? The first phase, construct development, answered the first sub-question: Is it possible to identify key attributes of teaching for social justice both in the extant literature on teaching and teacher education and within a teacher preparation program in the Pacific Northwest? What are these key attributes and their indicators? Answering this sub-question involved working with faculty and students in the teacher preparation program, reviewing syllabi from the teacher preparation program, and connecting these findings with the extant

literature on social justice teaching outlined in Chapter II in order to identify key locally

valued and research supported social justice teaching practices.

The second phase, item writing and review, answered the second sub-question:

are those attributes relevant and necessary to teaching for social justice, and if so, is it

possible to categorize them within an extant framework for organizing teaching

practices? To do so, I utilized the findings of Phase 1 of the present study to develop a set

of observable attributes and indicators that align with the key teaching domains (learning

environment, curriculum, and pedagogy) articulated by O'Brien, Steward, & Moje (1995)

as described in the theoretical framework presented in Chapter II, and presented in Figure

2.2. These attributes were then subjected to review by an expert panel of graduate

students in teacher education.

The final phase of the assessment development answered the third sub-question:

can an assessment designed to provide in-service and pre-service educators feedback on

the presence of such attributes of teaching for social justice be scored reliably and do how

do the items function? Answering this sub-question involved pilot-testing the assessment

on a sample of pre-recorded classroom observation videos to evaluate item function and

inter-rater reliability analyses. The following sections describe the specific methods I

used in each phase of the study to develop the TSJFA and evaluate the reliability and

validity of the assessment.

Research Design

The identification of key behaviors associated with pre-service and in-service

teacher engagement with social justice teaching, the distillation of those behaviors into an

assessment framework, and subjection of that assessment to review and pilot-testing

involves using classical test theory (e.g. Lord & Novick, 1968) through a mixed methods research design (Allen & Yen, 2002). These analyses use experimental methodology and social science research design grounded in the positivist philosophical tradition (e.g. Comte, 1865/2009). Ontologically, positivists believe that there is an extant objective reality (Robson, 2002) that is derived from sensory experiences and interpreted with lock and reason. Within positivism, knowledge and "Truth" exist in an absolute sense within both the natural and physical and social worlds and can be found in *a posteriori* knowledge (Macionis & Gerber, 2010).

Classical test theory. Classical test theory posits that an individual's observed score on an assessment is the summation of two components; 1) the individual's true score and 2) measurement error (Allen & Yen, 2002), or:

$$X = T + E$$

where *X* is the observed score, *T* is the true score, and *E* is the measurement error. The true score is the perfect, error-free measurement of an individual's ability. Following the logic of central-limits theorem, the true score can be understood as the average of the observed scores obtained over an infinite number of repeated measurements. Measurement error is the discrepancy between the observed score and the true score (Lord, 1964).

When extrapolated to a population, classical test theory affords considerable insight as to the quality of an assessment instrument (Cronbach, 1951). One important derivation is test reliability, or

$$\rho_{XT}^2 = \frac{\sigma_T^2}{\sigma_X^2}$$

Where the observed test score reliability, ρ_{XT}^2, is the ratio of true score variance (σ_T^2) to observed score variance (σ_X^2). Given that the observed score variance can be conceptualized as the summation of true score variance (σ_T^2) and measurement error variance (σ_E^2), this can be further expanded to:

$$\rho_{XT}^2 = \frac{\sigma_T^2}{\sigma_T^2 - \sigma_E^2}$$

This formula implies that test reliability is improved when unexplained variance (measurement error) is decreased.

Classical test theory provides an important framework for conceptualizing how an assessment instrument functions and provides statistical tools for evaluating the overall quality of the assessment instrument. The operationalized definition of observed test scores as the summation of true scores and measurement error, along with relation of variance of observed test scores to true score variance and measurement error variance, can further be leveraged within various item response theory (e.g. Bechger, Maris, Verstralen, & Béguin, 2003) and structural equation modeling frameworks (e.g. Kline, 2015) to provide a more granular view of item function, factor structure, inter-rater reliability, and other evaluative statistics.

Although the present assessment is developed using classical test theory, there are other paradigms of assessment design that could have been selected for the assessment development process, most notably, item response theory (IRT; e.g. Lord, 1980). IRT is founded on the idea that the probability that an individual's score on an item is a mathematical function of person and item parameters, or $B = f(P, E)$

where B is a behavior that is the function (*f*) of the person (*P*) and the environment (*E*) (Lewin, 1936). The person-parameter is generally understood as theoretical attribute that is not directly observable or "latent trait" (Lazarsfeld & Henry, 1968).

The fundamental difference between IRT and true score theory is in their fundamental epistemological assumptions (Dixon-Román & Gergen, 2013). True score theory has firm roots in a positivist tradition with a strong leaning towards an absolute "Truth" (Maul, 2013), whereas IRT is founded in a post-positivist tradition (Embretson, & Reise, 2000). I selected classical test theory over IRT for the present study primarily because I wanted to evaluate the use of explicit behaviors observable in classrooms as direct indicators of teaching for social justice rather than conceptualize of social justice as an unobservable theoretical latent trait. The rational for this decision connects to the expressed aim of this project outlined in Chapter I to provide feedback on those behaviors in order to address the motivational needs of pre-service and in-service educators. Treating social justice as an unobservable theoretical latent trait would undermine this expressed aim.

Mixed methods research design. In conjunction with classical test theory, the development of the Teaching for Social Justice Formative Assessment (TSJFA) leverages both qualitative and quantitative research methods in a quantitative-dominate sequential mixed methods research design (Johnson & Onwuegbuzie, 2004). Qualitative data were gathered and analyzed first in order to develop the TSJFA which was then subjected to quantitative validity and reliability analyses. The aim of utilizing both qualitative and quantitative research methods and methodologies within the same study is done to leverage the strengths and address the limitations intrinsic to each individual research

methodology (Johnson & Turner, 2003). The use of mixed methods research designs has grown significantly in the past 20 years as social scientists better understand the value of this eclecticism. Tashakkori and Teddlie (2010) outline three key issues in utilizing mixed methods research design; 1) conceptual orientation, 2) methods and methodological issues, and 3) contemporary application.

One key issue in the current debate over the usage of mixed methods research design is the irreconcilability of the divergent philosophies of research that underpin qualitative and quantitative research paradigms; as Tashakkori and Teddlie (2010) articulate, issues of conceptual orientation. Because the philosophies that ground different research methods differ in fundamental conceptions regarding both their understanding of the world and understanding of knowledge (their ontological and epistemological assumptions), reconciling the two paradigms has been difficult for the pilot. Although various frameworks have been offered in attempts to address these issues (e.g. Johnson & Onwuegbuzie, 2004), such approaches are not above reproach (e.g. Teddlie & Tashakkori, 2003). To avoid this tension, I utilize a subsequent rather than concurrent mixed methods design; qualitative research methods are utilized during the initial generative phase of the present study, after which quantitative research methods are used. In other words, I leverage the abductive quality of qualitative research before applying inductive quantitative research methods in a manner that aligns with well-established model of inquiry (Yu, 2006).

Following the concerns regarding the philosophical foundations of mixed methods research design, Tashakkori and Teddlie (2010) further identify additional methods and methodological issues guiding the application of specific research praxes.

These issues stems from the justification for usage of a mixed methods design, in combination with the reconciliation of the specific methods employed. Morse (2010) offers five key issues to attend to when selecting a specific mixed methods design: 1) theoretical drive, 2) core component, 3) supplemental component(s), 4) pacing, and 5) point of interface. Within the present study, the theoretical drive was to leverage the abductive findings of the qualitative research phase in order to develop a measurement instrument that is then subjected to inductive quantitative analyses. Therefore, the present study focused on the quantitative analyses of the measurement properties of the assessment instrument, which were supplemented by the qualitative generation of items for the instrument. The pacing of the study was, therefore, sequential rather than simultaneous. Finally, the point of interface was analytic rather than narrative.

Finally, Tashakkori and Teddlie (2010) identify additional issues regarding the contemporary application of mixed methods research design. Specifically, they address the politics of conducting mixed methods research and discipline and domain-specific research orientations and methodological preferences. For example, it may be difficult for certain configurations of mixed methods research to be accepted and published in some subject areas (Welch & Welch, 2004; Hurmerinta-Peltomaki & Nummela 2006). Given the current orientation of the pilot of social psychology, I have opted to use a quantitative-dominate sequential mixed methods research design that aligns with generally accepted research practices in the assessment development process (Croker & Algina, 2008).

The use of a quantitative-dominate sequential mixed methods research design within a classical test theory framework allowed for the development and evaluation of a

formative assessment aimed at providing pre-service and in-service teachers feedback

regarding use of research supported and locally valued social justice teaching practices.

In the following sections, I outline the specific research methods and methodologies

employed in the three phases of assessment development and evaluation. This includes 1)

construct development, 2) item development and review, and 3) assessment pilot-testing.

Phase 1: Construct Development

In order to identify key classroom behaviors associated with teaching for social

justice and answer the first research sub-question (Is it possible to identify key attributes

of teaching for social justice both in the extant literature on teaching and teacher

education and within a teacher preparation program in the Pacific Northwest? What are

these key attributes and their indicators?), three data sources were used to identify and

prioritize key locally valued social justice classroom behaviors. First, I conducted three

90-minute semi-structured interviews with key instructional faculty in the teacher

preparations program. Second, I conducted two 60-minute focus groups with six to seven

pre-service teachers. Finally, I conducted content analyses of syllabi for all courses in the

teacher preparation program. Data collected from these three sources were coded for

themes (Saldaña, 2015) and used to triangulate locally valued key attributes of teaching

for social justice. These results were then compared to the findings of the extant literature

on social justice teaching outlined in Chapter II in order to identify key behaviors that

were also research supported.

Setting. Although the broader aim is to develop a formative assessment

instrument that can be used to evaluate both pre-service and in-service teacher

engagement with specific social justice teaching practices, data were primarily collected

from within a teacher preparation program in the Pacific Northwest. This was done for several reasons. First, given the specific and explicit social justice commitments of the teacher preparation program, it was a rich source of information and natural match for this research. Second, given the research and teaching aims of faculty selected to participate in the present study, they represent some of the foremost experts on the subject of social justice teaching in the field. Third, many graduates of the program have and will go on to teach in the surrounding school districts; thus, in many ways the teacher preparations program population subsequently becomes a significant portion of the local teaching population and inferences made from one can be generalized to the other, within reason. Fourth, the pre-service teachers were at a unique point where they were still proximal to the literature and theories on social justice teachings taught within the teacher preparation program but had also completed their student teaching practicums and thus were uniquely able to connect social justice theory to praxis. Finally, although the specific social justice teaching practice valued within the teacher preparation program context might differ from those espoused by other populations, grounding these practices within the extant literature on social justice teaching suggests that value of these practices is not unique to the program.

      Participants. The population of instructional faculty from which a volunteer sample (Kemper, Stringpilot, & Teddlie, 2003) of participants opted to participate in semi-structured interviews included all instructional faculty and staff at a large research university in the Pacific Northwest who are teaching or have taught courses in the teacher preparation program that explicitly engage the idea of social justice within the course's content. This population of teacher educators who explicitly engage the idea of social

justice was selected in order to offer insights specifically on how faculty in the program define social justice, the literature these faculty engage in building their conception of social justice, the motivational factors faculty perceive to underpin whether pre-service and in-service teachers engage in social justice teaching practices, and the key classroom behaviors they believe are important for pre-service and in-service teachers to demonstrate in the classroom. Three of the ten faculty who meet the eligibility criteria agreed to participate in the present study. Due to the small number of faculty who meet the eligibility criteria, demographic information on how participants self-identify (e.g. race, gender, age, tenure-status, sexual orientation, etc.) is unavailable as reporting such information would risk identifying individual participants (Demographics, n.d.).

The population of pre-service teachers from which a volunteer sample (Kemper, Stringpilot, & Teddlie, 2003) of participants opted to participate in focus groups included all students in the 2016-2017 cohort of the teacher preparation program. Participants were recruited through the virtual learning environment from both sections of a course focused on teacher knowledge. This course is one of only a few classes that all future elementary and secondary education teachers are required to take. This population of future educators towards the end of their degree program provides me insight into how students internalize and understand the concept of social justice and how they perceive and intend to operationalize this ideal in their future classrooms. Of the 83 students enrolled in course, 13 agreed to participate in the present study. Two groups of students ($n = 6$ and 7) were sorted based on availability. Due to the homogeneity of the student population, demographic information on how participants self-identify (e.g. race, gender, age, sexual

orientation, etc.) are unavailable as reporting such information would risk identifying individual participants (Demographics, n.d.).

In addition to the transcriptions and pilot notes from both the semi-structured faculty interviews and graduate student focus groups, the textual content from all 2016-2017 teacher preparation course syllabi was also analyzed. In addition to allowing for the examination of potentially divergent or absent conceptions of social justice throughout all courses in the program, these documents allowed me to triangulate (Flick, 2004) the findings from the interviews and focus groups. For example, if both the faculty and the graduate students espoused a shared value or identified a key behavior, but that idea was absent or at odds with the textual content of the syllabi, this would generate additional questions and require additional exploration. Contrarily, if the idea were supported by the textual content of the syllabi, then this would bolster the finding.

Instruments. For both the semi-structured interviews with faculty and the first section of the focus group discussion with pre-service teachers, a list of open-ended questions was provided to participants and used to generate conversation and discussion. Additionally, the focus groups with graduate student used the nominal group technique (Delbecq & VandeVen, 1971) to generate and prioritize a list of key classroom behaviors associated with pre-service and in-service teachers' engagement with social justice.

Semi-structured Interview Protocol. For the 90-minute semi-structured interviews with faculty, 11 questions were developed to help generate conversation. These questions focus on how the faculty define social justice, the literature they draw upon which supports their understanding of social justice, and identification of key behaviors associated with the enactment of social justice in pre-service and in-service

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teacher classrooms. Questions were presented to faculty in the Department of Education

Studies for feedback and review, after which several questions were re-worded to better

meet the needs of the present study. These items were further refined upon feedback from

doctoral students in both the Education Policy, Leadership, and Methodology and Critical

and Sociocultural Studies program in Education departments. A complete list of question

used for the 90-minute semi-structured interview with faculty is presented in Appendix

C.

Focus Group Discussion and Nominal Group Technique Protocol. For the 60-

minute focus groups with pre-service teachers, five questions were used to help generate

15-20 minutes of conversation and the students then participated in 40-45 minutes of

nominal group technique. These questions focus on defining social justice and exploring

the underlying motivational factors of expectancy, value, and cost these students

associate with enacting specific behaviors associated with teaching for social justices.

Questions were developed with the assistance of research faculty in the Department of

Education Studies refined upon feedback from doctoral students in both the Education

Policy, Leadership, and Methodology and Critical and Sociocultural Studies in Education

departments. The nominal group technique focused on generating and prioritizing a list of

key behaviors associated with pre-service and in-service teachers' engagement with

social justice teaching. A complete list of focus group questions is presented in Appendix

D and nominal group technique procedures are presented in Appendix E.

Procedures. A single 90-minute semi-structured interview (Seidman, 2013) was

conducted with instructional faculty who opted to participate in the present study during

late Spring Term 2017. All interviews took place in in the faculty member's office on the

university's campus during normal operational hours (9:00am-5:00pm). Semi-structured interview questions (see Appendix C) and consent forms outlining the larger study and interview procedures were delivered to participants at least one day but no more than one week in advance of all interviews. These questions were used to guide discussion; however, following the procedures for semi-structured interviews outlined by Seidman (2013), a dialogical approach was employed to maintain a more natural conversational atmosphere. In addition to hand-written pilot notes, a digital recorder was used to record audio for all interviews, which was then used to transcribe the conversation for coding (Saldaña, 2015) to identify key indicators and attributes of teaching for social justice. Following all interviews, a thank-you note was delivered electronically to participants along with an offer for participants to review transcripts and notes taken during the interview and recording. All participants declined to review the transcripts and notes.

A single, 60-minute focus group (Seidman, 2013) was conducted with each group of participating pre-service teachers during early Summer Term 2017. All focus groups met in a conference room within education complex at the university. Consent forms, discussion questions, and nominal group technique (Delbecq & Van de Ven, 1971) procedures were presented to participants at the start of the session. Each session began with a brief (15-20 minute) discussion guided by the provided list of discussion questions (see Appendix D). These questions were used to guide discussion; however, following the procedures for leading focus group discussions outlined by Morgan (1997), a dialogical approach was employed in order to maintain a more conversational atmosphere. Following the brief discussion, participants were prompted to identify and

prioritize a list of key teaching behaviors associated with teaching for social justice using the nominal group technique (Delbecq & Van de Ven, 1971).

The nominal group technique is a focus group technique in which a group is presented with a problem, allowed time to formulate solutions, share ideas, discuss divergent responses, and vote-rank the most important/best ideas. Participants were briefed in nominal group technique procedures and provided an opportunity to discuss social justice teaching broadly before the facilitator prompted participants to reflect silently and write down key attributes of social justice teaching for five minutes. After that period, participant ideas and concepts were collected on a white board. The facilitator then led participants in a categorization exercise where common ideas were combined and redundant ideas removed. Participants were then asked to rate each category as most important (5), very important (3), or somewhat important (1); participants were told to leave un-important categories unscored. This scoring scheme was selected to maximize consensus (Thier & Mason, 2018). All votes were taken anonymously on proved 3" x 5" note cards. The focus group protocol can be viewed in Appendix E and prompt sheets provided to participants for generating ideas are presented in Appendix F. Data collected included focus group participant notes on the provided prompt sheets, vote-ranking cards, the final prioritized list of key social justice teaching behaviors, and recorded audio from each focus group, which was transcribe for coding (Saldaña, 2015).

Data analysis. Data from all three sources were analyzed using grounded theory content analysis techniques (e.g. Lincoln & Guba, 1985; Strauss & Corbin, 1990) in RDQA package (Huang, 2012) in *R* open access software (R Core Team, 2012).

Grounded theory content analysis is a qualitative data analytic technique in which inferences are derived from texts using a systematic method to code and interpret data (Saldaña, 2015). Emergent codes are first inductively derived from the data using open coding, where each syntactical unit is catalogued by the underlying idea, concept or action. After the initial open coding phase, codes are then categorized into like types and common themes using axial and selective coding (Blair, 2015).

Phase 2: Item Development and Validation

The aim of Phase 2 was to answer the second research sub-question (are those attributes relevant and necessary to teaching for social justice, and if so, is it possible to categorize them within an extant framework for organizing teaching practices?). Following the procedures outlined in *The Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999), a test blueprint was developed using the theoretical framework outlined in Chapter I, explored in depth in Chapter II, and presented in Figure 2.1. This blueprint is presented in Appendix G. Key classroom behaviors associated with teaching for social justice that were identified and triangulated through the faculty interviews, pre-service teacher focus groups, and content analysis of course syllabi in Phase 1 of the present study were distilled into an assessment framework focused on observable attributes and indicators. These attributes and indicators were then subjected to external review by graduate students within the teacher education department at the university using an online survey.

Setting. Although the broader aim of the present project was to develop a formative assessment instrument that can be used to evaluate both pre-service and in-service teacher engagement with specific social justice teaching practices, item review

surveys were conducted with graduate students in the teacher education department within the college of education. This was done for several reasons. First, given the specific and explicit social justice commitments of the department, it was a rich source of information and natural match for this research. Second, many of the graduate students come or will go on to teach in the surrounding school districts; thus, in many ways the department population is reflective of the local teaching population and inferences made from one can be generalized to the other, within reason. Third, most of the graduate students within the department are at a unique point where they are both proximal to the literature and theories on social justice teachings and the realities of teaching in a K-12 classroom, and thus are uniquely able to connect theory to praxis. Finally, although the specific social justice teaching practice valued within the department context might be different than those espoused by other populations, grounding these practices within the extant literature on social justice teaching suggests that value of these practices is not unique to the program.

Participants. Participants for Phase 2 of the present study were recruited from two distinct populations. First, participants were recruited from 2016-2017 graduates of the teacher preparations program immediately following their graduation during Summer 2017 through the virtual learning environment for both sections of a teacher knowledge course. This course was selected as it is one of only a few classes all future elementary and secondary education teachers are required to take. This population of future educators, having completed their degree program, was selected because they were uniquely situated to offer insight into how individuals transitioning from pre-service to in-service teachers internalize and understand the concept of social justice and how they

perceive and intend to operationalize this ideal in their future classrooms. Ideally, surveys were to be sent to students immediately before graduation, so as to maximize student response.

Unfortunately, due to the short length of 4-week summer sessions, the need to collect data for Phase 1 of the present study during the summer session, and the time needed to amend internal review board permissions to conduct research with human subjects from this population, it was not possible to recruit participants until after their graduation and departure from the university. Although it was still possible to disseminate the survey through the virtual learning environment for the course and students retained access to their university email accounts, the fact that students had moved on made it less likely that they would check those email accounts. Additionally, many potential participants also had new responsibilities in preparation for the 2017-2018 school year (their first year as a certified teacher), leading few members of this population ($n = 10$, response rate $= 12\%$) to participate in the item review survey.

Due to the poor response rate of recent graduates, a second population was selected from which to recruit participants for the item review survey. Ph.D. students and candidates within the department's doctoral program were recruited during early Fall Term 2017 through the department-maintained email listserv. This population was selected as the program was housed within the same department from which participants in the previous data collection phase were selected, the program shares similar values and commitments (in addition to faculty) with the teacher preparation program, most of the program's students and candidates have served as K-12 educators, many currently serve as graduate employees within the department teaching undergraduate and graduate

courses in pre-education and teacher education, and most engage issues of equity and social justice as part of their scholarship and research.

Item review survey. Following the identification of key social justice teaching practices in Phase 1 of the present study and utilizing the test blueprint developed out of the literature review outlined in Chapter II, a set of 15 social justice attributes, each with a set of 3-6 indicators, in 4 domains was developed. Draft lists of these attributes, indicators, and domains were reviewed by research faculty in the Department of Education Studies and graduate students in the Department of Education and Education Methodology, Policy, and Leadership familiar with the aims of the overarching research project and specific content of the items. Through an iterative process, a final list of 11 attributes, each with 3-6 indicators, in 4 domains was retained. These attributes, indicators, and domains are presented in Table 2. Following the item review procedures outlined by Haynes, Richard, and Kubany (1995), these attributes and indicators were then included on an digital survey instrument including prompts for participants to indicate the relevance and importance of each attribute, to select and suggest appropriate indicators for each attribute, and to situate each attribute within it's appropriate domain, resulting in a total of 50 questions. This survey was reviewed by research faculty in the Department of Education Studies, graduate students in the Department of Education Methodology, Policy, and Leadership, and researchers at outside intuitions for content, clarity, usability, spelling, grammar, and aesthetics. Minor changes were made in response to this feedback. The final digital item review survey is presented in Appendix H.

Procedures. Participants from the pool of eligible graduates of the 2016-2017 teacher preparation cohort ($n = 83$) were recruited through their university email address using a digital invitation to participated sent through the online digital learning environment for a teacher knowledge course at the end of summer, 2017. The invitation to participate included an introduction to the overarching study, outline of the scope and aim of the item review process, and an anonymous link to the digital, online item review survey hosted on the University of Oregon Qualtrics site. Participants had one week to complete the survey.

Participants from the pool of eligible Ph.D. students and candidates in the doctoral program ($n = 23$) were recruited through their university email addresses through the department maintained email listserv at the beginning of Fall Term, 2017. The invitation to participate included an introduction to the overarching study, an outline of the scope and aim of the item review process, and an anonymous link to the digital, online item review survey hosted on the University of Oregon Qualtrics site. Follow-up emails were sent four and six days after the initial email. Participants had one week to complete the survey.

Data analysis. In order to evaluate the relevance and importance of attributes included on the Teaching for Social Justice Formative Assessment, each item was subjected to three analyses: 1) the content value ratio (CVR, Lawshe, 1975), 2) the content validation index (CVI, Davis, 1992), and 3) the factor validity index (FVI, Rubio, Berg-Weger, Tebb, Lee, & Rauch, 2004).

One of the most common and popular methods of quantitative item review and evaluating item for content validity is the Lawshe approach (1975). In this method, a

panel of experts is asked to review each item and respond if the skill or knowledge

measured by a specific item is essential, useful by not essential, or not necessary. These

results can then be evaluated, using the following formula to construct the content value

ratio (CVR):

$$CVR = \frac{n_e - N/2}{N/2}$$

Where n_e represents the number of panel members who identify the skill or knowledge

measured by a specific item as essential and N represents the total number of panel

members (Lawshe, 1975). A positive CVR represents more than half of the panel

members identify the skill or knowledge as essential; whereas, a negative CVR represents

fewer than half of the panel members identified the skill or knowledge as essential. Ayre

and Scally (2014) have established critical values for Lawshe's CVR weighing the

possibility of type I errors against sample-size.

The content validation index (CVI) involves asking a panel of experts to evaluate

each item with regards to its relevance to the underlying construct. Davis (1992)

recommends having panel experts rate each item on a 4-point scale with the following

ordinal values: 1 = not relevant, 2 = somewhat relevant, 3 = quite relevant, 4 = highly

relevant. The CVI is then calculated as follows:

$$CVI = \frac{n_3 + n_4}{N}$$

where n_3 and n_4 represent the number of panel members who rate the item as either 3,

quite relevant, and 4, highly relevant, and N represents the total number of members on

the panel (Davis, 1992). Although Davis (1992) provides values for determining whether

there is sufficient consensus, more recent methodological work (e.g. Polit & Beck, 2006) has updated these criteria.

The factor validity index (FVI) (Rubio, Berg-Weger, Tebb, Lee, & Rauch, 2004) is a method designed to evaluate the degree to which a panel of experts agree that an item corresponds with the intended underlying constructs. Panel experts are asked to assign each item to either one of a provided set of factors or identify additional factors to which the item corresponds. The FVI can be derived by using the following formula:

$$FVI = \frac{n_a}{N}$$

where n_a represents the number of experts that agree with the predetermined factor structure and N = the total number of expert panel members. Rubio et al. (2003) recommend a FVI > .80 as evidence of adequate agreement of the underlying factor structure.

Phase 3: TSJFA Pilot-test

The aim of Phase 3 was to answer the final research sub-question (Can an assessment designed to provide in-service and pre-service educators feedback on the presence of such attributes of teaching for social justice be scored reliably and do how do the items function?). After the TSJFA was constructed and the items reviewed, I pilot-tested the assessment on a sample of pre-recorded videos of classroom teachers. The purpose of pilot-testing the TSJFA was to evaluate test reliability, item reliability, and item function. In order to conduct these analyses, a sample of 30 video recordings was reviewed by a team of five research assistants and myself.

Data source. Pre-recorded videos for evaluation were selected from the Teaching and Learning Exploratory High-Leverage Practice (HLP) Video Library at the Center for

Educational Design Evaluation and Research (CEDER) at the University of Michigan. Videos in the HLP Video Library were captured during the 2012-2013, 2013-2014, 2014-2015, and 2017-2018 academic years. The videos in the library capture a variety of content areas including mathematics, English language arts, social studies, and science literacy across classrooms in grades ranging from kindergarten to high school. Each video was selected by CEDER to highlight a specific TeachingWorks "high-leverage" teaching practices such as leading a discussion, explaining and modeling content, and diagnosing patterns of student thinking. Videos were collected in part through financial support from the Bill & Melinda Gates Foundation. Permission to conduct secondary analysis on the videos from the Teaching and Learning Exploritory Video Library was secured through Engagement and Development Specialist at CEDER in accordance with the original IRB protocol for collecting the videos. Videos were screened in order to insure sufficient length and content to evaluate all 11 attributes on the TSJFA. Of the 83 videos in the HLP Video Library, 35 videos met these requirements. A random sample of 30 videos were selected for the present analysis.

Measures. Using feedback provided by respondents to the item review process outlined in Phase 2 of the current study, the iteration of the TSJFA implemented during the pilot-test phase of the present study included 11 items, each with 3-6 indicators, in four domains. Additionally, the instrument included administration instructions and procedures in addition to separate pages for collecting observations and notes that provide insights to the evaluators who will conduct the observational assessment. The TSJFA used in Phase 3 of the present study is presented in Appendix I.

Procedures. Research assistants were recruited from graduate students in the College of Education at the University of Oregon. Research assistants were selected for their experience as classroom teachers, familiarity with the content of TSJFA, and commitment to realizing the equitable aims of the overarching study. Each research assistant completed the Collaborative Intuitional Training Initiative modules for Social-Behavioral-Educational Researchers required by the University of Oregon Internal Review Board and two hours of scoring training before collecting data for the present research project. Scoring training involved an introduction and overview of the present study, a brief review of the foundational literature grounding the TSJFA in the extant literature examining social justice teaching practices, a review of the TSJFA, and practice scoring using pre-recording classroom observations. The complete training manual for the TSJFA is presented in Appendix J.

Data analysis. The pilot study's results were evaluated for: 1) test reliability, 2) item reliability, and 3) item discrimination.

Test reliability. For assessments using constructed-response items, evaluations of inter-rater reliability, or the degree to which individual judges score each observation the same, are an important consideration (Smollkowski & Gunn, 2012). In the present study, I evaluate test reliability using two methods: 1) Interclass correlation and 2) Krippendorff's alpha.

Interclass correlation. The interclass correlation (ICC) is a descriptive statistic that can be used to evaluate the consistency of quantitative measurements made by different judges evaluating the same observation (Shrout & Fleiss, 1979). There are several formulas that can be used to calculate the interclass correlation. The process for

selecting the appropriate formula for calculating the ICC centers on four key questions:
1) are all observations evaluated by all judges, 2) are the judges in the present study selected from a larger population, 3) is the aim to evaluate scores against a single, "correct" observation or the mean of all judges across the observation, and 4) is the primary interest in consistence or agreement (Koo & Li, 2016)?

In the present study, all observations were not evaluated by all judges, judges were assumed to be selected from a larger pool of potential judges, scores were evaluated against the mean score of all judges, and the primary interest agreement. As such, I used a Two-way random effects, absolute agreement, multiple raters/measurements interclass correlation or *ICC(2,k)* (Shrout & Fleiss, 1979). The formula for calculating *ICC(2,k)* is:

$$ICC(2,k) = \frac{BMS - EMS}{BMS + (k-1)EMS + \frac{JMS - EMS}{n}}$$

Where *BMS* is the between observation mean squared, the *EMS* is the error mean square, *JMS* is the judge mean squared, *k* is the number of judges, and *n* is the number of observations (Shrout & Fleiss, 1979). An *ICC(2,k)* less than 0.50 indicates poor interrater reliability, values between 0.50 and 0.75 indicating moderate reliability, values between 0.75 and 0.9 indicating good reliability, and values above 0.90 indicating excellent reliability (Koo & Li, 2016). I calculated the ICC(2,k) for each item, subscale, and the overall TSJFA using the *psych* package (CITE) in R open access software (R Core Team, 2014).

Krippendorff's alpha. In addition to the evaluating test reliability using the interclass correlation, or *ICC(2,k)*, I also evaluated interrater agreement using Krippendorff's alpha (Hayes & Krippendorff, 2007). There are several reasons why I selected Krippendorff's alpha over other measures on inter-rater reliability. First,

Krippendorff's alpha assess agreement between multiple judges independent of the number of judges employed to assess each observation and is, therefore, robust to permutations of judges by observations. Second, it is grounded in the distribution of the scale points actually used by the judges and not biased by the difference between *a priori* conceptions of what the distribution may look like and what the observed data are (Hayes & Krippendorff, 2007). Additionally, Krippendorff's alpha provide a less biased estimate of interrater agreement than other measures such as ICC when the measurement design for the pilot test was not fully crossed (Rater X Target), nor nested (Rater:Target), as the present study is (an ill structured measurement design, Putka, Le, McCloy, & Diaz, 2008). I calculated the Krippendorff's alpha with bootstrapped confidence intervals using code developed by Proutskova (2017) within *R* open source software (R Core Team, 2013) using the following equation:

$$\alpha = 1 - (n-1)\frac{\sum_c \sum_{k>c} o_{ck \, interval} \, \delta_{ck}^2}{\sum_c \sum_{k>c} n_c \, n_{k \, interval} \delta_{ck}^2}$$

where $\sum_c \sum_{k>c} o_{ck \, interval} \, \delta_{ck}^2$ is the observed disagreement between raters, $\sum_c \sum_{k>c} n_c \, n_{k \, interval} \delta_{ck}^2$ is the disagreement between raters attributable to chance (Krippendorff, 2011).

Item Reliability. In addition to evaluating test reliability, I also tested item reliability analysis for all items on the TSJFA. Item reliability was evaluating using two technique, 1) Cronbach coefficient alpha and 2) the item reliability index.

Cronbach coefficient alpha. Cronbach's coefficient alpha is useful tool for examining measurement error due to content sampling. Unlike Kuder-Richardson formula 20, which can only evaluate nominal scores (Kuder & Richardson, 1937), coefficient alpha can be calculated for items scored either dichotomously or scored using

multiple values, as is used on the TSJFA (Nunnally, 1978). The formula can be expressed as:

$$\alpha = \left(\frac{k}{k-1}\right)\left(1 - \frac{\sum SD_i^2}{SD^2}\right)$$

Where k is the number of items, SD_i^2 is the variance of individual items, and SD^2 is the variance of total test score (Cronbach, 1951).

Item reliability index. The item reliability index (IRI) is a function of variability in item score and the item score correlation with overall performance. The formula for the IRI is defined as

$$IRI = \sigma_i p_{ix}$$

were σ_i is the item standard deviation and p_{ix} is the item correlation with overall test performance (Crocker & Algina, 2008).

Item discrimination. In order to provide information about the differences between individuals, items should discriminate between individuals who are very high and very low on the assessment. For constructed-response items worth more than one point, item discrimination can be factored using the correlation between the number of score points and total score:

$$r_{xy} = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2)}}$$

Where x represents the score on a specific item and y represents overall test score (Crocker & Algina, 2008). Items exhibiting good measurement properties should have a positive correlation; stronger positive correlations are associated with better discriminating items.

Scientific Analysis Summary

The overarching purpose of this section of the present study was to work with teacher educators and graduate students to develop and evaluate the reliability and validity of an instrument that can be used to provide structured feedback regarding the inclusion of specific locally-valued and research-supported social justice teaching practices. This section outlined the procedures implemented towards realizing that aim, using classical test theory (Lord & Novick, 1968) and a quantitative-dominate sequential mixed methods research design (Johnson & Onwuegbuzie, 2004). Although the assessment developed through this process, the TSJFA, focuses on key practices valued in the local context, it is grounded in the current scholarship in teaching for social justice and, therefore, may have broader appeal and utility beyond this context. In the next section I discuss the philosophical methodology I concurrently used to address the second research question.

Philosophic Analysis Methodology

The idea of justice is arguably one of philosophy's fundamental questions (Ewing, 2012). Despite its centrality there is still significant disagreement surrounding the idea; more than 100 years after his death it is still argued as to whether Karl Marx was (e.g. Tucker, 1969) or was not (e.g. Wood, 1972) committed to the idea of justice. Even Rawls (1971), who dedicates more than 600 pages to the idea, comes away not with a concept of justice, but a rather a theory; that is to say, justice remains the object of inquiry and not an instrument for further examination. Despite countless hours of study from so many renowned scholars, many of them dedicating their careers to the examination of justice, there is still little consensus field of philosophy as to even a rudimentary definition of the

idea. It is of little surprise, therefore, that both the definitions of social justice and perceptions of what constitute key social justice teaching behaviors vary significantly depending on the adopted philosophical foundation, as Dover (2009) noted. Even scholars who ground their work within the same philosophic framework often come to divergent conceptions of how teachers might enact social justice. In this section, I articulate how I leverage Deleuze and Guattari's (1980/1988) concept of a "*perceptual semiotics*" (Adkins, 2015, p. 1) within a cartographic framework as a method for reconceiving how social justice functions in teaching and teacher education in relation to the assessment development process.

Concept-as-method

Building on Claire Colebrook's (2013) call for researchers within a particular strand of philosophically driven qualitative research to begin thinking with divergent modes of analysis that eschew traditional positivist methodologies, Hillevi Lenz Taguchi (2016) provided an analytic framework for leveraging philosophic concepts as a mode of inquiry, or "concept as method" (p. 213). Building on Deleuze and Guattari's (1991/1994) articulation of philosophic concepts, Lenz Taguchi suggests that the strength of thinking research with concepts instead of traditional methodology is their ability to afford new insights into phenomena of interest. As Lenz Taguchi and St. Pierre (2017) articulate,

> Rather than reinforce and perpetuate a long-standing *image of thought*—for example, the Cartesian image of thought—philosophical concepts can, in fact, produce an entirely different image of thought in which existing concepts, such as

the concept of methodology itself, cannot be thought and in which others we have

not yet imagined can. (p. 643, emphasis in the original)

Grounding scholarship in a philosophic concept instead of traditional research

methodology creates new opportunities for modes of inquiry unthinkable within present

paradigms of qualitative, quantitative, and/or mixed methods (St. Pierre, 2016). However,

even within a research project leveraging extant methodologies (as the present study

does), starting with a philosophic concept leads those methodologies to function

differently than they do within their traditional post-positivist foundations.

This Deleuzoguattarian notion of philosophic concepts is predicated on the idea

that concepts have the power to both reconfigure knowledge structures and

simultaneously influence material changes. To put a concept to work is to alter the field

of study in such a fundamental way as to reconfigure the very notion of what is and can

be studied (Lenz Taguchi, 2016). This is not to suggest Deleuzoguattarian philosophy as

synonymous with nominalism; that the mediatory role of discourse subjugates being to

knowning. Rather, the idea of the philosophic concept resonates with how Deleuze and

Guattari think outside of this material-discursive duality. Deleuzoguattarian philosophy is

predicated on the idea of ontological monism, that the nature of being is undifferentiated,

productive difference. Concepts function as epistemic frameworks struggling with this

problematic nature of an endlessly differentiating reality. To alter the concepts that

underpin a particular inquiry unsettles the presuppositions upon which the present

problem is founded; the fundamental assumptions regarding reality that make a specific

strand of study possible. Thus, to put a concept to work is to reorient ourselves to the

reality in a manner that not only produces knowledge, but is different than our taken-for-granted assumptions.

Rather than synthesizing the idea of social justice for application within teacher education, this study builds on Deleuze and Guattari's (1991/1994) idea that the aim of philosophic concepts is disrupting what is already presumed to be known. One avenue through which the tension between conflicting conceptions of social justice can be explored is through the exploration of the linguistic presuppositions that ground these divergent ideations. Using Deleuze and Guattari's (1980/1987) concept of a perceptual semiotics, I attend to how the psychometric analysis outlined in the previous section is dependent on a representational conception of language and, through re-conceptualizing language as perceptual rather than informational or communicative, I examine the new possibilities for social justice made possible. In the following section, I outline Deleuze and Guattari's (1980/1987) argumentation supporting their conception of a perceptual semiotic. This argumentation provides a framework for reconceiving the philosophic limitations present within the development of a formative assessment for evaluating individual teaching practices.

The Concept of a Perceptual Semiotics

Semiotics play a significant role in several of Deleuze and Guattari's works, specifically in *Proust and the Sign* (Deleuze, 1964/2000), *Cinema 1: the Moving Image* (Deleuze, 1983/1986), and *Cinema 2: The Time Image* (Deleuze, 1985/1989). However, they offer a particularly clear articulation of the concept, what Atkin's (2015) refers to as a "perceptual semiotics" (p. 1), in the second volume of *Capitalism and Schizophrenia* (Deleuze & Guattari, 1980/1987). In the fourth plateau of that text, the authors engage the

then-current debate between two divergent philosophies of language over the nature of linguistic variation (Massumi, 1992). On the one side, anchored by linguist and analytic philosopher Noam Chomsky (1966), a conception of linguistics predicated on an abstract, "pure" linguistics or "universal grammar" (p. 6) On the other side, grounded in the socio-linguistic theory of William Labov (1972), a pragmatic conception of language that sees variation not as divergent from an abstract linguistic constant, but as the foundation of language.

Rather than simply espouse their own theory of language, Deleuze and Guattari instead engage the foundational assumptions that make the Chomsky-Labov debate possible; specifically, they engage what they see as the four "postulates of linguistics" (p. 75), or the metaphysical presuppositions upon which either conception of language can be founded. These assumptions are 1) that language is informational and communicational, 2) that there is an abstract machine of language that does not appeal to any "extrinsic" factors, 3) that are constants or universals of language that enable us to define it as a homogeneous system and finally, 4), that language can be scientifically studied only under the conditions of a standard or "major" language. Deleuze and Guattari deconstruct each of these postulates, highlighting how each is fundamentally flawed. In doing so, they develop their own linguistic theory, one that neither fixates on languages' stability as Chomsky (1965) does, nor on languages tendency towards change as does Labov (1972). Instead Deleuze and Guattari highlight languages twin tendencies towards both stability and change, arguing for a language not defined by what it is, but what it does; a "perceptual semiotics" (Adkins, 2015, p. 1).

Deleuze and Guattari's (1980/1987) argumentation regarding how language functions provides a framework for *mapping* the perceived philosophical limitations of the assessment development process. These limitations are a result of an orientation towards the research process that follows the same structures and logic as Chomsky's (1965) notion of a "universal grammar" (p. 75), or the construction of constants out of a heterogeneous field. Traditional research methodology follows a similar "logic of extraction" (Mazzei, Graham, & Smithers, 2018, p. 3), aiming to identify common attributes and patterns of relations across data sources, settings, and individuals. Conversely, critical methodologies have often focused on deconstructing the arbitrary and capricious foundations which make such methodology possible (e.g. Burman & MacLure, 2005). Starting with Deleuze and Guattari's concept of a perceptual semiotics refocuses research away from the supposed incommensurability and philosophical limitations of these divergent methodology. As Atkins (2015) articulates, "The task is not to categorize science as either royal or nomad, but to recognize that all scientific practices will involve some combination of both royal and nomadic tendencies" (p. 13). (Re)thinking the assessment development process through Deleuze and Guattari's (1980/1987) concept of a perceptual semiotics allows for a divergent point of entry into palpating the possibilities and limitations of the assessment development process, one that allows for palpation of both the tendency towards stasis and towards change. In the following section, I outline Deleuze and Guattari's argumentation. In Chapter IV, I overlay this argumentation onto the assessment development process in order to attend to how traditional research methodology follows the same flawed logic as traditional

linguistics. In the final chapter, Chapter IV, I then examine what this understanding makes possible in relation to traditional research methodology.

Postulate I: Language is Informational and Communicational

At the core of Deleuze and Guattari's (1980/1987) argument is a critique of the presupposition that language functions as a system for the transmission of facts; that a speaker can relay information to a second party through speech. Deleuze and Guattari argue that two key points undermine this understanding of language. First, they differentiate language from the semiotic systems employed by other species (such as bees and ants) through its functions as *indirect discourse*. Whereas ants communicate only through direct discourse – for example, one ant may share the location of food with a second ant but the second ant cannot share that information with a third (ibid., p. 76) – language not only can but necessarily always functions as hearsay or indirect discourse (Holland, 2013). A linguistic sign can function only in connection with other signs; accounts must be connected with other accounts within an ongoing discourse in order to be intelligible and function. There is never a singular signification, as it is only though the structure of language that communication is possible. No utterance, even of a single word or command, is singular but is instead part of a discursive regime that provides the conditions of possibilities for such utterances. Language never functions from a first instance to a second, but always from a second to a third.

There is no individual point of origin of an act of communication, as communication is always already part of a linguistic system, a system that both makes the individual act possible and is reproduced within each act of enunciation. There is no non-linguistic point of departure, no reference external to language; "language does not

operate between something seen (or felt) and something said, but always goes from saying to saying" (Deleuze & Guattari, 1980/1987, p. 76). Language does not function through a singular act of communication, as this is impossible; communication is only possible within a system through which the individual instances become possible. Language is never originates from a singular subject or speaker, but always emerges from a collective through which the possibilities of language exist in potential. As Deleuze and Guattari articulate "There is no individual enunciation. There is not even a subject of enunciation. Yet relatively few linguists have analyzed the necessarily social character of enunciation…enunciation in itself implies *collective assemblages*" (p. 80, emphasis in the original). Collective enunciation is the fundamental instance of language always entailing a specific social context (Holland, 2013).

Second, Deleuze and Guattari argue that language function through speech-acts, that language does not describe things, but is a productive force. This function can best be observed in *incorporeal transformations,* statements that produce real but non-physical changes – a priest's announcement of a couple's marriage or the foreperson's judgment of an individual's guilt. In both instances the act of transformation is effectuated through language; the union is produced through the announcement, the defendant is transformed to convict through the judgment (Bell, 2018, p. 67). Although these examples provide clear instances of language functioning as a productive force, all language similarly functions through speech-acts. Building on Austin's (1962) concept of *illocutionary acts*, Deleuze and Guattari argue that action is presupposed though speech; that all language is fundamentally illocutionary (Adkins, 2015). Even statements of facts

implicitly contain a command statement: "let it be said that…" The illocutionary act is not that the statement is to be believed but that the listener is to obey (Holland, 2013).

These two points, that language functions through indirect discourse and speech-acts, leave three impossibilities for traditional linguistics. First, language can no longer be considered a code and speech as communicative because defining them as such presupposes that the purpose of speech is to produce "true" sentences containing information provided by language. It does not; language is defined by what it does, not by the veracity of the statement. Second, language cannot be separated from pragmatics. Separating language from its specific function does not make sense as words only function in context through the relation between speaking and specific acts it presupposes. Third, it is impossible to separate language from speech. There are no universals in language, only the specific. It is not possible to analyze language without understanding its contingent deployment.

The notion that language is communicative and informational presupposes that language can primarily be understood as the relation between whether it truly informs or not. However, the real opposition is between language's contradictory tendencies towards both stasis and its unruliness. Deleuze and Guattari argue that language is not informational or communicative, but commanding (p. 76), it's primary unit the *order-word*. Illocutionary acts and commands are not a subset of linguistic functions, but language's primary function; order-words are not acts of communication or information transfer, but speech-acts that transform through the immediacy and redundancy of the statement and the act itself (Bell, 2018, 67). "Order-words do not concern commands only, but every act that is linked to statements by 'social obligation;' every statement

displays this link, directly or indirectly" (Deleuze & Guattari, 1980/1987, 79). There is no

pure language, only language bound-up with action (Adkins, 2015, p. 67). The

interrelation between speaking and acting is stabilized by order-words: "Je ne parle pas,

je suis parl[4]" (Domenach, 1967, p. 772). There is not an individual who speaks, but one

that is spoken through the conditions of possibilities - social norms, customs, people –

what Deleuze and Guattari term the "collective assemblage of enunciation" (p. 88).

Deleuze and Guattari note there are two distinct assemblages at play, the *concrete*

mechanic assemblages of bodies and the aforementioned collective assemblages of

enunciation. If the collective assemblage of enunciation functions through the linguistic

structures (through the form and substance of expression as discussed below), then the

mechanic assemblages of bodies corresponds to the form and substance of content. That

is, if the collective assemblages of enunciation functions within the act of signification

through the social structures in which those acts become possible, then it is the machinic

assemblage of bodies (a particular constellation of individuals, ideas, and structures) that

serves as both the conditions of possibility for language and the sight at which language

functions through the transformative capacity of the order-word.

> An assemblage comprises two segments, one of content, the other of expression.
> In the one hand is the machinic assemblage of bodies, of actions and passion, an
> intermingling of bodies reacting to one another; on the other hand is a collective
> assemblage of enunciation, of acts and statements, of incorporeal transformations
> attributed to bodies. (Deleuze & Guattari, 1980/1987, p. 88).

It is these incorporeal transformations that allow the collective assemblage of

enunciation to transform the concreate mechanic assemblage without changing the bodies

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[4] I don't speak, I am spoken.

themselves, as language is fundamentally illocutionary. The form of the collective assemblage of enunciation is the particular expression of the set of incorporeal transformations that effectuate the condition of possibility of language within the event, coextensive with the statements, utterances, and behaviors that constitute the moment. This set of variables – the components within the collective assemblage of enunciation – should not be confused with the set of external conditions that render a statement meaningful. It is also to the incorporeal transformations that are redundant to and inseparable from the circumstance (Adkins, 2015). The order-words are redundant to the pure acts and incorporeal transformations that allow for the possibility of an 'act of enunciation,' and these incorporeal transformations are in turn the substance of the collective assemblages of enunciation; assemblages that are the condition of possibility of language itself, or the effectuating condition that allows for the transformative effects order-words bring about. Collective assemblages of enunciation function through incorporeal transformations, transformations which "allow for the construct of the new" (Bell, 2018, 70).

Postulate II: There Is an Abstract-machine of Language that Does Not Appeal to any Extrinsic Factor

The information within a command already presupposes the order-words and the assemblages of enunciation which function as the condition of possibility of language and, hence, the possibility of transmitting information regarding external circumstances. There can be no exclusion of factors conventionally considered to be external or extrinsic to language, because these are the factors that make language what it is and enable it to do what it does (Holland, 2013). A theory of language which focuses on what language is

without acknowledging what language does, that is, linguistics that do not attend to the titular extrinsic factors of language, cannot account for the contingent deployment of language within the event of speech. "Learning is the appropriate name of the subjective acts carried out when one is confronted with the objectivity of a problem; whereas, language designates only the generality of concepts or the calm possession of a rule enabling solutions" (Deleuze & Guattari, 1980/1987, p. 164).

Building on Hjelmslev's (1928) sign model, Deleuze and Guattari define the relation between the concrete mechanic assemblages of bodies and the collective assemblage of enunciation as that of content and expression. Hjelmslev subdivides content and expression into substance and form, or the variables that constitute both content and expression and how those variables are organized. The content substance is the psychological and conceptual manifestation of the sign and the expression substance is the physical substance wherein a sign is manifested (Giuffrè, 2016). A *sign* is the function between two forms, the content form and the expression form and the totality of the substances of content and expression; "On the one hand it is a mechanic assemblage of bodies, of actions and passions, and intermingling of bodies reacting to one another; on the other hand it is a collective assemblage of enunciation, of acts and statements, of incorporeal transformations attributed to bodies" (Deleuze & Guattari, 1980/1987, p. 88). The *abstract machine of language* functions as the linguistic content (in relation to the collective assemblage of enunciation that is the corresponding expression), both of which contain form and substance. Content, or the mechanic assemblage of bodies, includes all the relevant substances and how they intermingle, or "all the ways that bodies affect and are affected" (Adkins, 2015, p. 73). Expression, the collective assemblage of enunciation,

is the order-words and the incorporeal transformations attributed to bodies in the mechanic assemblage.

Language functions through the relation of the mechanic assemblage of bodies and the collective assemblage of enunciation. In this relation, content and expression (or the mechanic assemblage of bodies and the collective assemblage of enunciation) form a single horizontal axis. Cutting across vertically are the circumstances, variables, and degrees of deterritorialization (Adkins, 2015, p. 73) in relation to both content and expression, transforming both, though potentially at different speeds.

This distinction between content and expression is real but relative, as they are attributes of a single substance, that is, they are both attributes of the abstract machine of language. The relation between words and things is not one of representation – "words do not represent of signify things" (Adkins, 2015, 75), but attributional. That is, the variables which comprise the machinic assemblage of bodies and the collective assemblages of enunciation are attributable to either only within the context of the event of language, the particularly pragmatic instance of enunciation.

> The independence of the form of expression and the form of content is not the
>
> basis for a parallelism between them or a representation of one by the other, but
>
> on the contrary a parceling of the two, a manner in which expressions are inserted
>
> into contents, in which we ceaselessly jump from one register to another, in which
>
> signs are at work in things themselves just as things extend into or are deployed
>
> through signs. An assemblage of enunciation does not speak "of" things; it speaks
>
> *on the same level as* states of things and states of content. So that the same *x*, the
>
> actions or as a sign constituting an act or order-word, depending on which form it

is taken up by (for examples, the theoretico-experimental aggregate of physics).

In short, the functional independence of the two forms is only the form of their

reciprocal presupposition, and of the continual passage from one to the other.

(Deleuze & Guattari, 1980/1987, p. 87, emphasis in the original)

This undermines linguistic analyses that seek to identify "deep grammatical structures" (e.g. Chomsky, 1965), as any analysis of language-in-abstraction is neither abstract enough nor attends to the pragmatic nature of language. "The abstract machine as it relates to the diagram of the assemblage is never purely a matter of language, except for a lack of sufficient abstraction. It is language that depends on the abstract machine, not the reverse" (Deleuze & Guattari, 1980/1987, p. 91).

Postulate III: There are Constants or Universals of Language that Enable Us to Define It as a Homogeneous System

Deleuze and Guattari argue that the problem with traditional linguistics, and science more broadly, is that it functions by dividing a continuous system into discrete units, arranged as constants in a homogenous system or what they term the *royal science* (Deleuze & Guattari, 1980/1987, p. 368). Structural linguistics, like all sciences, takes messiness and extracts something stable from it to study; as Chomsky argues, the messiness of language (its pragmatics) is interesting but cannot rise to the level of a science (Adkins, 2015, p. 77). Conversely, other such as Labov (1972) contend that language cannot be separated from its pragmatics, but is instead founded on pragmatics, as pragmatics alone are capable of attending to the continuous variation of language. Language is not made of constants but of variables and is a heterogeneous system.

Language is a creative process rather than the repetition of a set of relations that remains constant.

The fundamental problem with the Labov and Chomsky debate is that there is not a tension between the presumed similarities of a statement across context or the uniqueness of a statement within a particular set of circumstances. Both analyses are fundamentally flawed, as both require extracting a constant out of either a mechanic assemblage of bodies (as the latter) or collective assemblage of enunciation (the former), that is, both calcify either content and expression of the abstract machine of language. Structural linguistics, or the royal science of language, in focusing on deep grammatical structures and universals, is only possible under the condition that the form and substance of expression (the collective assemblage of enunciation) are held constant. Conversely, dogmatic fixation on the uniqueness of each contingent deployment of language, of linguistics' pragmatics taken to its logical extreme, similarly constructs a constant out of the form and substance of content (the machinic assemblages of bodies). Deleuze and Guattari argue that the only constant is of variation in both content and expression, "to place the statement in continuous variation is to send it through all the prosodic, semantic, syntactical, and phonological variables that can affect it in the shortest moment of time" (Deleuze & Guattari, 1980/1987, p. 94). The abstract machine does not serve as an anchor for content and expression and it is not the condition for content and expression. Rather, the abstract machine describes, not determines, the variations of the variables of content and expression (Adkins, 2015).

The Abstract machine of language is singular; it is a way of thinking about variation of substance (variables) of the statement. "There is no primacy of the

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individual; there is instead an indissolubility of a singular Abstract and a collective

Concrete. The abstract machine does not exist independently of the assemblage, any more

than the assemblage functions independently of the machine" (ATP, 100). An individual

is only the temporary effect of the way in which an abstract machine and a concrete

assemblage presuppose on another (Adkins, 2015, p. 79). "[Life] is difference all the way

down, or more precisely collective, heterogeneous assemblages all the way down" (Bell,

2018, p. 75). A linguistics that focuses on constants is bound to result in homogenous

systems. Only a linguistics that focuses on both the abstract machine (variation) and the

concrete assemblage (variables) can hope to create something new (Adkins, 2015).

Understanding the similarity of the statements not by reducing the three to two or one,

but understanding all instances on a continuum of variation so as to illuminate similarities

and differences among them as expressions of different concrete assemblages (Holland,

2013).

Postulate IV: Language Can Be Scientifically Studied Only under the Conditions of a Standard or Major Language

The study of language is a political project of homogenizing, centralizing, and

standardizing language (Adkins, 2015, 79). "The scientific enterprise of extracting

constants and constant relations is always coupled with the political enterprise of

imposing them on speakers and transmitting order-words" (Deleuze & Guattari,

1980/1987, p. 101) – the state, the apparatus of capture, the law. There is no such thing as

a standard language, only a power takeover by a dominate language; standardizing a

language so as to be able to study it scientifically is a preeminently political operation

(Holland, 2013). Laws can only function as organizing principles under two conditions;

1) laws must be fixed and 2) laws must be understood. To be fixed and understood, laws must be promulgated through standardized languages predicated on constants – the royal science of linguistics.

The political fiat of producing or inducing a major language is that it necessitates the production of a minor language – that which fails to conform to the major, the variations or pragmatics. "There are not, therefore, two kinds of languages, but two possible treatments of the same language" (Deleuze & Guattari, 1980/1987, p. 103). There are two sides to the abstract machine of language, one oriented to the presumed constants and the other towards understanding language as a series of variables (of both content and expression) in constant variation. "*You will never find a homogenous system that is not still or already affect by a regulated, continuous, immanent process of variation*" (Deleuze & Guattari, 1980/1987, p. 103 emphasis in the original). Language is an assemblage with two tendencies, one towards stasis and one towards change (Adkins, 2015, p. 80).

Language is always a process of heterogenesis: whereby the variables of expression (substance of the collective assemblage of enunciation) and variables of content (substance of the mechanic assemblage), the intermingling of bodies and the set of incorporeal transformations, come to be drawn into a plane of consistency (habitation – the problem) that allow for the contemplation and transformation that give rise to something new, to a determinate expression or rule that then comes to be identified as an established way of speaking, a structural invariant.

One of the key mistakes to be found among those working in linguistics, Deleuze and Guattari claim, is to assume the forms of expression are adequate for understanding

the linguistic system. If language is understood as an assemblage, however, one cannot separate out the formal structures of expression from the material contents, whether these contexts are understood as the arbitrary reference of an expression or as external non-linguistic factors (Bell, 2018, p. 77). If one recognizes the tetravalent nature of the linguistic assemblage, however, and thereby brings into play the pragmatic, bodily components of the assemblage, then one has taken abstraction further and "one necessarily reaches a level where the pseudoconstants of language are superseded by variables of expression internal to enunciation itself [and] these variables of expression are then no longer separable from the variables of constant with which they are in perpetual interaction" (Deleuze & Guattari, 1980/1987, p. 91).

It is in holding the form and substance of expression constant (the function of a royal science) that we see the calcification of an idealized standard that allows for the law to function, or as Deleuze and Guattari term, the *majoritarian* ideal. It is this *majoritarian* ideal that assumes the position of authority and authenticity, functioning as a presupposition that define both the members subsumed by its categorical ascription and the relation of the major-mode to that which fail to express those characteristics. The *majoritarian* assumes this state of power and domination not through the process of aggregation or extracted constant, but through its function as the presumed measure. It is not demarcated by what is, but rather articulates an asymptotic limit of what should be.

By extracting constants and general and variegated language-usage to erect a standard or major language, linguistics ends up excluding everyone from the majority (Holland, 2013). No one conforms perfectly to the standard, and in fact everyone deviates from it to some extent – so that, paradoxically enough, *becoming-minoritarian* becomes

the new universal (Holland, 2013). "Continuous variation constitutes becoming-minoritarian of everybody, as opposed to the majoritarian Fact of Nobody" (Deleuze & Guattari, 1980/1987).

The qualities of the minoritarian mode are not assumed *a priori* and, thus, are not simply the 'that which is not,' which stands as the antithesis of the majoritarian. Rather, the minoritarian is ephemeral and emergent, its attributes expressed in and as its parts. The majoritarian is sharply bounded and serves a limiting function, whereas the minoritarian exists in potentiality. Expressions of the minoritarian mode are not predetermined but rather swerve and arch in interesting and unique ways.

A major language involves the territorialized forms of the linguistic assemblage, the set standard and norms whereby other languages are judged and compared. The rules and invariant structures of a major language, however, are made possible by the collective assemblage of enunciation and hence presuppose the deterritorializing segment of the assemblage, the process of continuous variation as Labov recognized (Bell, 2018, p. 80).

The rigidity of the majoritarian mode disallow for an emergent expression of 'it-in-potential.' An individual cannot become-majoritarian as it is only the embodiment of fixity, a category of absolutes. Furthermore, the individuals can never fully embody the requisite attributes of the majoritarian, and can only be seen as divergent from the totalizing expression. It is in this necessary movement from majoritarian to becoming-minoritarian that allows for individual expression and the actualization of possibilities. It is only in this becoming-minoritarian that being (as a verb) can be.

Becoming-minor, the tendency towards change is not external to an assemblage, but always a part of it (Adkins, 2015, p. 81). On one hand, the order-word imposes judgment through incorporeal transformations – a death sentence (extracts the discrete and unchanging out of the flow of life). The other side is flight, escape, revolution – the "pass-word". The order-word is an assemblage (tending towards stasis and change). The "pass-word" is the other side of the "order-word" that puts its judgment into variation. "A single thing or word undoubtedly has this two-fold nature: it is necessary to extract one from the other – to transform the compositions of order into components of passage" (Deleuze & Guattari, 1980/1987, p. 110).

The problem with Chomsky's view of language is not only that it attempts to capture the perceived stability of language abstracted from context, but that it relegates everything outside of the constant as extra-linguist, outside the study of language. The "science" of linguistics has been to study language's ability to organize and relative stability, ignoring everything else as "extra-linguistic". To look at a becoming-minor science of language would be what Atkins (2015) calls the "four postulates of pragmatics: 1) language is neither informative nor communicative, 2) the abstract machine of language appeals to extrinsic factors, 3) language has only variables and forms a heterogeneous system, and 4) language does not require a standard language to be studied. "There are passwords beneath order-words. Words that pass, words that are components of passage, whereas order-words mark stoppages or organized, stratified compositions" (Deleuze & Guattari, 1980/1987, p. 110). As one pushes language away from the territorialized pole of the assemblage and away from its everyday usage, language itself becomes increasingly dynamic and creative; "In the order-word, life must

answer the answer of death, not by fleeing, but by making flight act and create" (Deleuze & Guattari, 1980/1987, 110).

Philosophic Analysis Summary

As others have argued (e.g. Mazzei, 2017; Mazzei, Graham, and Smithers, 2018), traditional empirical research (both qualitative and quantitative) is dependent on the structures of and orientation to a major language. From a methodological standpoint, the scientific analysis of social justice in teaching and teacher education outlined in the first section of this chapter is dependent on the function of social justice within a major language. Using Deleuze and Guattari's (1980/1986) concept of perceptual semiotics serves to disrupt this orientation of social justice towards a major language and articulate how social justice already functions within a minor language. To do so, I first identify how the scientific analysis is only possible through the functions of a major language. Then, following Deleuze and Guattari's argumentation, I articulate how social justice, even in the context of the scientific analysis, slips from a major language and towards a becoming-minor language.

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Summary

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In this chapter, I articulate how I palpated social justice within teaching and teacher education through both traditional research methodology and assessment development procedures as well as through philosophical analysis. Using classical test theory (e.g. Lord & Novick, 1968) through a mixed methods research design (Allen & Yen, 2002) and following the psychometric development procedures outlined by Crocker and Algna (2008) and AERA, APA, & NCME (1999), I articulate how I developed and evaluated the validity and reliability of a formative assessment in order to provide

structured feedback to pre-service and in-service teachers about the use of research support and locally valued social justice teaching practices – the Teaching for Social Justice Formative Assessment (TSJFA).

I then articulate how using Lenz Taguchi's (2016) notion of "concept-as-method" I leverage Deleuze and Guattari's (1980/1988) concept of a perceptual semiotics in order to (re)conceive the foundational assumptions of this assessment development process and attend to the new possibilities and limitations made possible by attending to this (re)conception. In the following chapter, I offer the results of palpating social justice through both methodologies. To aid in clarity, I organize and differentiate the findings as follows: I subdivide the findings of the scientific analysis into each of the three phases of the study outlined in the first section of this chapter. The title of each section is demarcated with the appropriate phase number and brief description (e.g. "Phase 1: Construct Development). I subdivide the philosophical analysis into four sections, corresponding to each of the four postulates of linguistics. The title of each section is demarcated with the appropriate postulate number and brief description (e.g. "Postulate I: Language is Informational and Communicational"). After a brief introduction, I alternate the findings of the philosophical and scientific analyses, beginning by leveraging Deleuze and Guattari's interrogation of what they articulate as the first postulate of linguistics followed by the results of the first phase of the scientific analysis (construct development) and so on. In Chapter IV, I then examine the relation between these two analyses, discuss how they function in tandem and in relation to each other, and attend to the new possibilities and limitations made possible through the juxtaposition of both the old and the new empiricisms (St. Pierre, 2017).

CHAPTER IV

RESULTS

This chapter summarizes the results of the various analyses conducted during each of the three phases of developing the Teaching for Social Justice Formative Assessment (TSJFA) in order to answer the first research question - Can a formative assessment instrument be developed that is a sufficiently reliable and valid measure of pre-service and in-service teacher's engagement in specific research-supported and locally valued social justice classroom behaviors? In each of the subsections related to a specific phase of the instrument development, corresponding to the three sub-questions outlined in Chapter I, I reiterate the primary objective of the phase and the methodology used to answer the research question pertinent to that phase. Concurrently, I present the results of the post-qualitative analysis leveraging Deleuze and Guattari's concept of a "*perceptual semiotic*" (Adkins, 2015, p. 1) as a philosophical method for palpating how the assessment development process functions in relation to both a *royal* and *minor science* (e.g. Mazzei, Graham, & Smithers, 2018) and answer the second research question - 2)   Is it possible to consider the philosophical limitations of the assessment development process in a way that allows social justice to retain its liberatory potential? As discussed in Chapter III, these philosophical analyses are interspersed between the three phases of the assessment development process, *mapping* the project onto the four postulates of linguistics Deleuze and Guattari (1980/1987) respond to in their chapter titled "Postulates of Linguistics" (p. 75-110).

Postulate I: Language is Informational and Communicational

In order to attend to the second research question (Is it possible to consider the philosophical limitations of the assessment development process in a way that allows social justice to retain its liberatory potential?), in this section I report the results of mapping the foundational assumptions of the assessment development process onto Deleuze and Guattari's (1980/1987) first postulate of linguistics, the assumption that language is informational and communicational. Following their argumentation, it is apparent that the function of research is not the transmission of facts or the relaying of information. A scholar does not produce knowledge, but rather the process and concept of "knowledge construction" and idea of a "researcher" are byproducts of the process, co-constitutive in this doing of research. There is nothing internal to a piece of scholarship as research is always an act of indirect discourse, one connected to both a body of scholarship and a body politic (the machinic assemblage of bodies and collective assemblage of enunciation). A piece of research is not the production of new knowledge but a reconfiguration of extent ideas, concepts, and individuals. Research is an act of hearsay, enmeshed with a specific social context and conveyed from second person to third, not to be believed, but obeyed. Research is not descriptive but productive of a world in which such scholarship is made possible.

Within the context of the present project, there is no external concept of social justice to evaluate, but rather a subjectified ideal produced through this process. There is no body of scholarship which proceeds this project and from which such practices could be extracted. Rather, a body of research, a researcher, and a conception of social justice are produced at the confluence of the machinic assemblage of bodies (word, texts,

manuscripts, individuals) and the collective assemblage of enunciation (conceptions of justice, histories of oppression, modes of knowledge production). These subcomponents that give social justice its meaning, but rather they are the condition of possibilities through which a conception of social justice is able to effectuate. A piece of scholarship produces, it is not produced. It is made possible through the relation with those concepts, habituations, and actions that allow it to function. The researcher is not productive, but a confluence of concrete machinic assemblages of bodies and collective assemblages of enunciation; the entanglement of flesh and blood, synapses, and intuitional policies that allow for them to be scholars, concepts and ideas which precede and produce the scholar. There is no scholar nor scholarship in an ontologically stable sense, but rather one that is constantly being produced and in turn producing.

Research functions through *incorporeal transformations*, transformations in which individuals and ideas become scholarship and scholars; a manuscript is published and becomes an article, a student graduates and becomes a scholar, or an idea such as social justice transforms the ideation of behaviors in a classroom without acting on such bodies directly. It is not the physical change as much as the *illocutionary act* that defines what scholarship does. There may be a physical change – a manuscript may transition from a digital file to a hard-copy book – but that change is only in relation to the incorporeal transformation through which an idea becomes more or less calcified or worthy of publication. It is not as much that teacher practices become different, as it is those practices are transformed through the illocutionary act of being classified as attributes of teaching for social justice. Although the ultimate end may be to influence

those practices which teachers adopt, it is this incorporeal transformation that is the aim

of the present project, not in changing the acts themselves.

The present study's function is to calcify the act of teaching for social justice into

a discrete constellation of specific, universal practices, it is not to produce an external

validity by which the project is to be evaluated. Ultimately, the validation of the present

study is not in some abstract and absolute value of justice, but to one that is made

possible and resonates with the conditions that have made it possible, those attributes of

the machinic assemblage of bodies and collective assemblage of enunciation through

which the project becomes possible and acceptable. This conception of social justice is

not to be believed, but to be obeyed. There is not social justice on a conceptual level, only

one at the level of the pragmatic, one which can effectuate incorporeal transformation;

social justice's function as an *order-word*.

If social justice within the present study functions as an order-word, one that

demands a particular understanding, then there are significant implications as to the aim

of this project. In seeking to calcify social justice, the present project's aim is to answer

the question "what is social justice?" (Adkins, 2015, p. 9). This is the aim of a royal

science (Deleuze & Guattari, 1980/1987, p. 361) of teaching for social justice, one that

seeks stability and certitude. For social justice to be meaningful, it must be concrete. But

in answering the question rather than addressing the problem, social justice becomes a

"death-sentence" (ibid. p. 88), that is, it becomes entangled with only those conditions of

possibilities, those concrete assemblages of bodies and collective assemblages of

enunciation, that are present within the event (e.g. Beck & Gleyzon, 2016) of doing

research. This conception of social justice is one which is knowable and concrete, but

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cannot respond to needs outside the purview of the project or the present political milieu – a (re)statement of the philosophical limitations of the present project.

This *tracing* of social justice can be "put back on the map" (Deleuze & Guattari, 1980/1987, p. 13). We can return from the present project and consider not the question of social justice, but the problem (e.g. Wasser, 2017); how does social justice function, and for whom? In reorienting scholarship away from that which is concrete, that which corresponds with some extant and external construct, we can attend to those philosophical limitations and engage in a mode of scholarship that is reflexive, a scholarship that looks not at the concrete but the ephemeral and attends to those lines of flight that are new possibilities.

Phase 1: Construct Development

In order to answer the first sub-question of the first research question (Is it possible to identify key attributes of teaching for social justice both in the extant literature on teaching and teacher education and within a teacher preparation program in the Pacific Northwest? What are these key attributes and their indicators?) I report findings from document analysis of course syllabi, qualitative coding of faculty interviews, and pre-service teacher responses during focus groups using nominal group technique results as outlined in Chapter III. I organize these results using the framework developed by O'Brien, Stewart, & Moje (1995) and presented in Chapter II – categorizing locally valued social justice teaching practices in relation to the learning environment, curriculum, and pedagogy domains (see Figure 2.1). I then highlight points of convergence regarding specific practices associated with teaching for social justice highlighted within each source.

Document Analysis of Course Syllabi

All available course syllabi from each course listed in the under the teacher preparation program from the 2017-2018 academic year were collected through academic program. Documents were then analyzed using grounded theory content analysis (Saldaña, 2015) and categorized into the core teaching domains emphasized by O'Brien, Stewart, & Moje (1995). Data were analyzed using the *RQDA* package (Huang, 2011) in *R* open source software (R Core Team). Of the 30 courses listed in the course catalogue, syllabi for three were unavailable. Of the remaining 27 courses, the class syllabi for two-thirds (18 out of 27) highlighted, modeled, or referenced specific social justice teaching practices. Of these, five referenced attributes of the learning environment, seven referenced attributes of the curriculum, and 12 identified pedagogical practices associated with teaching for social justice. Six syllabi referenced specific teaching practices in two or more of these categories. I present the results of the document analysis in Table 1.

Learning environment. Syllabi for five courses specifically mentioned how teachers could support diverse learners in their classrooms by attending to various aspects of the learning environment. For example, the course description for an educational foundations course stated, a key aim is to prepare pre-service teachers "to create inclusive educational environments that respect the social-cultural and historical learning and life experiences of the individuals and communities we serve." Within the syllabi for those five courses, two specific aspects of the learning environment were highlighted; how teachers can foster inclusivity through 1) establishing personal connection to students and 2) honoring students' diverse experiences.

Table 1.

The Inclusion of Social Justice Attributes Within Domain by Course Topic

Topic	Social Justice	Learning environment	Curriculum	Pedagogy
Teacher Knowledge	Syllabus not available			
Educational Foundations	1	1		1
Sociology of Education	1			1
Technology				
ELL Pedagogy	1	1	1	1
ELA Pedagogy				
Literacy Pedagogy	1		1	1
Math Curriculum	1		1	
Math Curriculum				
Science Curriculum	1		1	
Science Curriculum	1		1	
Educational Psychology	Syllabus not available			
Educational Psychology	1	1	1	
Humanities Curriculum	1		1	
Writing Pedagogy	1			1
ELL Pedagogy				
ELL Pedagogy	1			1
Social Studies Pedagogy	1	1		1
Social Studies Pedagogy	1	1		1
Humanities Pedagogy				
Literacy Pedagogy				
Literary Pedagogy	1			1
Humanities Pedagogy	1			1
Math Pedagogy I	1			1
Math Pedagogy				
Science Pedagogy	Syllabus not available			
ELL Pedagogy				
Education Policy	1			1
	18	5	7	12

Notes. ELL – English Language Learners, ELA – English and Language Arts

One key attribute of teaching for social justice as an aspect of the learning

environment domain emphasized in the course syllabi was teachers building meaningful

relationships with students. For example, the course overview for an educational

psychology course specifically highlights that pre-service teachers in that class will

"develop a critical understanding of the interaction between cultural context, motivation,

and teacher-student relationships, and thereby be in a better position to consider for whom, in what context, and at what cost particular motivation and relational practices and proactive planning can be successful in supporting student learning and pro-social behavior."

Second, course syllabi also highlighted the importance of honoring students' diverse experiences in the classroom, as the course description for an educational foundations course which stated "[students will] develop recognition that as educators it is our responsibility to establish classroom learning environments that support the diverse needs of students, promote success with learning, and embrace heterogeneity." This extended into content area courses, such as a course focused on pedagogy to support students who were ELL, which emphasized in its course description that pre-service teachers were to learn how to be an advocate "for non-MUSE [non-mainstream U.S. English] speakers and for EL students in contemporary anti-immigrant and anti-public education context." Similarly, a key learning objective for pre-service teachers in a social studies pedagogy course was to "understand the concept of the social construction of historical knowledge and the implications of the concept for teaching social studies... understand how students' social and cultural identities mediates their encounter with social studies subject matter."

One pervasive idea throughout course syllabi related to the classroom environment (but also related to curriculum and pedagogy) was an emphasis on culturally responsive teaching practices. As outlined in Chapter II, culturally responsive and/or sustaining teaching requires teachers to not only adjust the curriculum they teach and pedagogical practices they employ, but also influences the broader learning environment

through how they relate to their students and foster cross-cultural dialogue (Gay, 2010).

Specifically, the course overview for an educational psychology course stated that

students would have opportunities to "adapt and apply research on cultural

responsiveness in restorative practices, trauma, and proactive behavioral interventions,"

and a key topic covered in social studies pedagogy course was "culturally sustaining

instruction framework."

Curriculum. Syllabi for eight courses specifically mentioned how teachers could

support diverse learning methods in their classrooms by attending to various aspects of

the curriculum. Within the syllabi for those five courses, two specific attributes of the

curriculum were highlighted. First, how teachers can enact social justice by selecting and

implementing an inclusive curriculum rich with diversity and second, how teachers can

enact social justice by selecting curriculum that connects learning to social issues that are

meaningful for students.

One key attribute within the curriculum domain highlighted in the course sylabi as

an important aspect of teaching for social justice was educators selecting an inclusive

curriculum. This includes attending to inclusivity with regards to who is represented

within the subject, as the course description for a science curriculum course highlighted

by stating "science has often been conceived as being removed from culture, race, class,

and gender, but we will start from the assumption that these aspects matter and impact the

teaching and learning of science." Additionally, inclusivity also includes attending to

what constitutes knowledge, highlighting the politics of the curriculum and the power to

define symbolic representation of the world (Sleeter & Grant, 1991), and a key course

topic in an educational psychology course highlighted the importance of attending to

"Curriculum/what counts as knowledge."

In addition to the importance of attending to the curriculum's inclusivity, a second attribute of teaching for social justice emphasized across course syllabi was the importance of connecting curriculum to social issues meaningful to students. For example, the course objective for a math curriculum course highlights that pre-service teachers should "demonstrate an understanding of mathematics as a complex, problem-solving field that involves social, cultural and political issues." This emphasis was evident in the key topics covered in several courses, such as a science curriculum course that included the key topic of "Equity & Social Justice in the science classroom," learning goals for courses such as a literacy pedagogy course where students would be able to "design, workshop, and publish cross-curricular critical literacy units," and course descriptions such as the one for a math curriculum course – "identify potential challenges to traditionally underrepresented students' learning of math and science." Additionally, many courses modeled an emphasis on selecting curriculum that connects to meaningful social issues, such as a humanities curriculum course required readings from Christensen (2009) and Michie (2009).

Pedagogy. Syllabi for 12 courses specifically mentioned attributes of teaching for social justice relevant to the pedagogy domain. Within the syllabi for those 12 courses, two specific aspects of pedagogy were highlighted. First, course syllabi emphasized the importance of supporting students' critical engagement, as the course object for writing pedagogy course articulates, "connect writing activities to **social justice themes** to help raise students' critical awareness of social factors that influence their education and their

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lives inside and outside school" (emphasis in the original). Second, syllabi emphasized the importance of holding all students to a high academic standard.

In many course syllabi there were explicit objectives connected to preparing pre-service teachers to engage in critical pedagogical practices. For example, the course descriptions for both a social studies and a humanity pedagogy courses emphasized critical teaching practices. Additionally, some courses went so far as to make critical pedagogy an explicit course aim; for example, an education policy course stated as a course objective that pre-service teachers should be able to "recognize appropriate policies and methods schools (and other social institutions) can use to practice and promote anti-colonialist professional practices for immigrant communities." While some courses discussed critical pedagogical practices in general, many cited specific conceptions and traditions of critical pedagogy. For example, an education policy course emphasized "anti-colonialist professional practices" and a literacy course emphasized "critical literacy pedagogy." Many of the textbooks selected for use in various courses emphasized critical pedagogical practices. For example, the required readings for a social studies pedagogy course included readings from Castro, Field, Bauml, and Morowski (2012) and Kumashiro (2015) and a literacy pedagogy course included texts by Karlsen and Westerlund (2015). Some courses provided pre-service teachers opportunities to engage in such critical pedagogical practices; for example, a sociology of education course had as a requirement that students "create educational campaigns that demonstrates how teachers can serve as change agents for transforming educational opportunities for students."

In addition to emphasizing the importance of engaging in critical pedagogical practices, many courses highlighted the importance of providing all students a high quality education and holding students to high academic standards. For example, a math pedagogy course included in the course description that

> "a teacher's commitment to promote equity in student learning and achievement is essential. Additionally, the same course further articulates as a pre-service teacher learning goal that 'promoting equity' means teaching in ways that actively support the learning of every student and do not inadvertently reproduce inequality across social groups."

A course focused on pedagogical practices for supporting students who were ELL also highlights high-quality teaching in relation to equity and diversity, listing as learning outcomes that pre-service teachers should be able to "differentiate language instruction and assessment for diverse student populations" and "foster multicultural learning and global citizenship." Other courses similarly connect quality teaching, holding students to a high academic standard, and social justice. For example, an educational foundations course noted in the course description that pre-service teachers should be able to "recognize the need to evaluate and select instructional and assessment practices in light of the question of: successful for whom, in what context, and at what cost?" highlighting the interconnection of critical pedagogical practices and high academic standards.

Grounded Theory Coding of Faculty Interviews

Interviews were conducted in faculty offices, per their request, in Spring 2017. Audio recordings were transcribed verbatim. Transcriptions were then coded for themes using grounded theory content analysis techniques (e.g. Lincoln & Guba, 1985; Strauss &

Corbin, 1990) and categorized into the key teaching domains outlined by O'Brien,

Stewart, & Moje (1995). Data were analyzed using the *RQDA* package (Huang, 2011) in

R open source software (R Core Team, 2013). Given the interview's focus and the

specific questions asked, all interview participants identified several specific practices

associated with teaching for social justice.

  Learning environment. One key finding in the interviews was the degree to

which faculty differentiated aspects of the physical learning environment from the

broader classroom atmosphere. Often, participants would discuss these issues entirely

separately, focusing on each as though they were separate domains. This was divergent

from how O'Brien, Steward, & Moje (1995) theorized each domain, and different from

how these practices were presented or emphasized in the course syllabi analyzed in the

previous section. In order to better attend to this divergence, the following section

subdivides learning environment into physical environment and classroom atmosphere.

  Physical environment. Faculty emphasized that how teachers arranged the

classroom's physical environment to create a welcoming atmosphere that supported

diversity was an important attribute related to teaching for social justice; as one

participant articulated "I'd start with the environment, what the classroom looks like?"

Across the interviews, three attributes emerged in relation to the physical environment; 1)

representation in classroom decorations, 2) displaying student work, and 3) arrangement

of student seating.

  One key aspect of the physical environment faculty identified as an important

attribute of social justice teaching was the depictions in posters and displays on the

classroom walls; as one participant articulated, "Who's represented in the posters? Is it

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the teacher's favorite interest, or is it something that connects to the community, to students' interest, without sort of gender, race, or class bias." Interview participants emphasized how these displays send important messages to students regarding who is and is not welcome in the classroom, in addition to communicating respect and support for diversity within the broader context and community.

In addition to representations that are free from biases, participants also identified an important need for students to see themselves and their personal work on the classroom walls; "It could be in the physical environment not only what's on the walls, but whose work is on the walls?" Faculty saw including student work on the classroom walls as an important way to both connect to students and to give students ownership of the physical space. Additionally, how such work was displayed was an important factor; "What kind of work [is displayed in the classroom]? Is it more community and cooperative verses competitive?" Connecting with an emphasis on cooperative learning discussed in this section under pedagogy, participants highlighted a need for teachers to model cooperative learning through the student work displayed in the classroom. Faculty also felt that student work displayed should be varied to provide students opportunities to demonstrate diverse strengths in addition to being free of value judgements or ranking.

Faculty identified the physical arrangement of desks and student seating as a third important attribute of social justice teaching within the physical learning environment; as one participant articulated, "How's the physical arrangement of the room? I'm going to create more of a community." Across the interviews, participants highlighted the importance of allowing students ample opportunities to learn and work together, "encouraging students to talk with one another." This emphasis on active and cooperative

learning requires a different set-up than traditional front-facing desk rows which orient students to the front of the classroom and focus attention on the teacher as the arbiter of knowledge. Instead, faculty emphasized the importance of small group discussion as an important attribute of social justice teaching; "I appreciate teachers who are facilitators of the learning, who are bouncing around, who are having conversations with small groups of students or pairs, or individuals."

Classroom atmosphere. In addition to aspects of the physical learning environment, faculty also emphasized the importance of creating an inclusive and welcoming classroom atmosphere in teaching for social justice; "everything that the teacher decides to intentionally do to create an environment where the students can also be on this journey, this journey of sharing each other's stories and identities and funds of knowledge." Across the interviews, two key themes emerged as key attributes that indicate teachers were fostering a classroom atmosphere conducive for social justice teaching; 1) facilitating positive interpersonal communication, and 2) building meaningful personal connections to students.

One key attribute of social justice teaching identified by faculty was creating opportunities for students to engage in meaningful and respectful conversations with each other and that "teachers value students' voices." This emphasis on positive interpersonal communication, particularly around meaningful issues relevant to students, connects with other aspects of social justice teaching discussed in the following curriculum and pedagogy sub-sections. Faculty also highlighted that it was not enough to simply ask students questions or provide students opportunities to engage in discussion around these issues, but that educators must scaffold students' engagement and conversations;

"intentionally creating lessons and strategies for students to have these kinds of conversations with each other." Faculty emphasized that social justice teaching requires educators to help build students' capacity to have meaningful conversations, as another participant articulates "what are the protocols, what are the agreements that we can all agree on in how we're going to share? But also, when students are sharing in pairs or in a small group, how am I going to actually help to guide and structure that so that they can have productive conversations?" Although developing this capacity in itself might not be an attribute of social justice teaching, it is an important foundation and capacity-building aspect of teaching for social justice.

The second key theme related to classroom atmosphere participants identified as a key attribute of teaching for social justice was the importance of teachers developing meaningful relationships with their students, as one interview participant noted, "I need to both teach algebra, but I also needed that ethic of care and connect with my students and all of that." Another participant notes that it starts at the beginning of the class, "A teacher saying hello to each student and greeting them by name. Maybe even asking a question about how was your soccer game, or did you get that science project done, some sort of human nice-to-see-you ethic of care, because if nothing else they are there, they showed up." Educators need to also connect with the students' broader community; one participant noted that social justice teaching can be indicated "by the way people relate to kids, relate to families, or to children or students. You could see that in how they interact with kids. The authenticity, an authenticity to know and help." Faculty noted that this includes not only educators knowing their students, but also modeling such openness and vulnerability, as one participant notes, "being genuine with students."

Curriculum. In addition to attending to aspects of the learning environment, faculty also identified several factors relating to the curriculum domain as attributes of social justice teaching. Specifically, faculty highlighted two attributes; 1) the degree to which the curriculum was inclusive both in representation and in content and 2) how the curriculum connected to contemporary social issues.

One key attribute of social justice teaching identified by faculty was the degree to which teachers selected and implemented inclusive curriculum, or as one participant articulates "connecting the curriculum to the students' ancestors and themselves." Faculty discussed inclusivity in two ways; the degree to which the curriculum included diverse representations of identity and experience and the degree to which the curriculum recognized diverse conceptions of knowledge. Participants identified representations of diverse experiences as one key aspect, expressing that such representations would be a strong attribute of social justice teaching. As one participant specifically noted in reference to the context of teaching literature, an attribute of social justice teaching would be to conduct an "author-check to make sure that the texts are representative and diverse." Another participant echoed this sentiment, emphasizing that teachers should select texts which specifically address the diverse experiences; "these books talk about racial diversity or these books talk about social inequalities or these books talk about exactly what the phenomenon is. Let's say these books talk about racism, these books talk about slavery, and these books are about immigrants." Additionally, faculty emphasized the importance of maintaining an "open curriculum," or recognize the socially-constructed aspect of knowledge and provide students with a curriculum that presents and retains this diversity.

In addition to selecting a curriculum inclusive in both representation and content, faculty also identified that selecting curriculum that explicitly connects to the experiences of students and address contemporary social issues is a strong attribute of social justice teaching. One participant articulated this, stating

> [Teachers] should own their own curriculum, even if they are using curricular resources to support their learning. I think those resources shouldn't be like drill-and-kill, or snippets of beautiful literature, but engaging kids in real science, math, computing problems. Engaging students in real literature and primary source artifacts in engaging and conversations of politics and social issues of our times.

Faculty articulated that an attribute of teaching for social justice was selecting texts and other curricular materials that present information in relation to real-world issues, particularly issues students' face in their everyday lives.

Pedagogy. All faculty interview participants emphasized several aspects of teaching related to the pedagogy domain as important attributes of teaching for social justice. One participant went so far as to define social justice teaching explicitly in relation to pedagogy; "To me a social justice teacher is someone who is thoughtful about the pedagogy, thoughtful about the kids, what they need." Across all participants, three key themes emerged in relation to social justice pedagogical practices; 1) that instruction be student- rather than teacher-directed, 2) that teachers model and provide students opportunity to engage in social critiques, and 3) that teachers hold all students to a high academic standard.

One key attribute of social justice teaching that interview participants identified was the use of student-directed pedagogical practices. Rather than students spending the majority of class time as passive participants in a lecture, faculty highlighted the importance of students being actively engaged in the learning process. One faculty member articulated, "Local curricular knowledge is insanely important. And being able to go deep in something is wonderful, and following students' own sense of inquiry and wonder is important." Connected to arranging the physical classroom to facilitate conversation and fostering a classroom atmosphere that encouraged students to engage in positive peer-to-peer communication, faculty also identified that student collaboration was an important part of connecting student-direct pedagogy to social justice teaching. One interview participant articulated, "next on the list would be a pedagogy that is inclusive, that allows for student collaboration and student talk about the subject area; allows for students ideas to be acknowledged and valued and built-upon." Many of the faculty alluded specifically to culturally relevant (e.g. Ladson-Billings, 1995) and culturally sustaining (e.g. Paris, 2012) pedagogical practices as an important part of student-directed instruction. One participant articulated this point saying "good teaching pedagogy, which I said before connects with students, connects with their interests, is responsive to the cultures that they bring in."

Faculty also articulated that modeling and providing students opportunities to engage in social critique as an attribute of social justice teaching, or as one individual articulated, "allowing those conversations to go where they sometimes need to go." Participants delineated between a curriculum that connects to contemporary social issues from pedagogical practices that not only allow, but train students to engage in social

analysis; one interviewee articulated, "I see social justice education having that socio-political bent to it, questioning authority, pushing up against capitalism and asking questions and pointing out contradictions and discussing tensions." These critical pedagogical practices differ from a socially relevant curriculum in that these practices emphasize how educators prepare students to see and discuss system inequities, "but as we're reading and comparing and contrasting characters in two stories, how can we talk about inequity or justice, right?"

Third, faculty identified holding all students to a high academic standard as a key pedagogical attribute of social justice teaching. Although participants emphasized the importance of critiquing current educational systems, they also articulated the need to prepare students within the context of those systems so as to avoid perpetuating the disenfranchisement of students from historically marginalized groups. One participant highlighted this point, stating that:

> Connecting back to standards is a good thing, and not all my colleagues would probably agree with that. Because if you don't, then kids are going to suffer next year because of the way schools are set up. Teachers do go with them. I don't get to go with them to their next teacher and say, by the way we skipped this whole topic area that your course depends on, fill it in. Our schools aren't set up that way. They should be, but because they're not, I don't think it should be set upon students to have big holes in their curricular knowledge.

Another participant articulated this as high expectations for all students without "an assumption of a particular homework meaning knowledge, but seeing schools as the place that has the responsibility doing that work." Faculty saw an important connection

between fostering close personal relationships with students through an inclusive classroom atmosphere and supporting them in this work, as one participant pointed out, "I need to both teach algebra, but I also needed that ethic of care and connect with my students and all of that." However, faculty differentiated grading students – providing numeric scores and ranking them – and providing them meaningful feedback; "I think you have to provide an honest evaluation to students. Because what happens is you really don't prepare them for the next levels of work, and then they then don't… feel confident when they're doing their future project."

Teacher-candidate Nominal Group Technique

Teacher-candidates were recruited from a teacher knowledge-focused course in their final summer term after completing their practicum and the majority of their course work required for their degree and licensure. Thirteen pre-service teachers agreed to participate in one of two 60-minute focus groups and were scheduled to attend a session based on their availability; Focus Group One had six participants and Focus Group Two had seven. Participants were briefed in nominal group technique procedures and provided an opportunity to discuss social justice teaching broadly before the facilitator prompted participants to reflect silently and write down key attributes of social justice teaching for five minutes. After that period, participant ideas and concepts were collected on a white board. The facilitator then led participants in a categorization exercise where common ideas were combined and redundant ideas removed. Participants were then asked to rate each category as most important (5), very important (3), or somewhat important (1); participants were told to leave un-important categories unscored. The results are presented in Table 2.

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Table 2.

Nominal Group Technique Results for Attributes by Group

	Focus Group 1		Focus Group 2	
	NGT Score	Rank	NGT Score	Rank
Learning Environment				
Reflexivity	21	1	11	3
Students needs	17	2	11	3
Personal Relationship	10	6	18	1
Positive Peer-to-Peer	4	8	13	2
Seating	3	9	6	11
Restorative justice			8	7
Curriculum				
Inclusive	16	3	9	6
Social			8	7
Pedagogy				
Critical	14	5	8	7
Student-directed	15	4	5	12
High quality instruction	8	7	11	3
High academic standards			8	7
Mean	12.00		9.82	
SD	6.12		3.60	

Learning environment. In both focus groups, participants identified several aspects of the learning environment as key attributes of teaching for social justice. Specifically, participants identified five attributes; 1) reflexivity, 2) honoring students' experiences, 3) building meaningful personal connections to students, 4) facilitating positive interpersonal communication between students, 5) arranging the classroom to allow students freedom of movement and communication, and 6) restorative justice classroom management practices.

Participants in both focus groups highlighted that teaching for social justice required educators to model and provide students opportunities to be reflexive and challenge their assumptions. Participants in Focus Group One highlighted the importance of modeling reflexivity, particularly in relation to the uneven power dynamic that exists

between students and teachers; as one participant articulated, "One of the biggest obstacles for me is making things transparent and it's hard when you're in a position of power." Participants in Focus Group Two emphasized the importance of pushing students to identify and confront their own biases, highlighting the need for students to "challenge and question their own assumptions."

Both focus groups ranked honoring students' experiences as one of the top three attributes of teaching for social justice. Focus Group One highlighted this through the category "Adapt to Meet Students' Needs." Participants articulated that social justice teaching requires educators to be sensitive to the needs of the diverse students they serve, "making sure that everyone feels safe and included and ready to go – they have the resources they need. That's been my project so far." Focus Group Two similarly articulated this concept through their category "Identifying and Supporting Students' Needs." Participants highlighted that they felt educators needed to be both proactive and reactive in identifying and supporting the needs of the diverse students in their classrooms. One participant highlighted this point, articulating that they had "worked with several trans students this year and try not to say things like 'ladies and gentleman' or trying to not use the Northwest idiom of 'you guys' that might be a trigger."

Both focus groups also identified educators building meaningful personal connections to students as an important attribute of teaching for social justice; as one participant articulated, "we always want to connect with students." Focus Group One highlighted that building meaningful relationships was a two-way process, one which required educators to be open, honest, and vulnerable with students. Similarly, Focus

Group Two emphasized the importance of mutual respect within the process of building meaningful relationships between teachers and students.

Facilitating positive interpersonal communication between students was also a common attribute highlighted by both focus groups. In each group, participants highlighted the importance of supporting positive student interactions, particularly around social issues. Focus Group One articulated this in their category "scaffold constructive peer-to-peer interactions," in which they emphasized the role of the educator in providing not only opportunities for social interactions, but structures and supports. Focus Group Two similarly highlighted the importance of such peer-to-peer interactions, but focused more on providing students' opportunities and supports to challenge and learn from each other, as is highlighted in their category "allow students to compare and integrate their perspectives with others."

In terms of the physical classroom environment, both focus groups highlighted the importance in using seating arrangements other than traditional front-facing rows; as one participant articulated, "I was amazed how much the people who supervised me were frustrated by my unwillingness to control the bodies of the children. But I feel like you can't be a social justice teacher without being aware of that power dynamic and there is a strong desire in public education to exert that power over bodies." Participants emphasized that the physical classroom environment needed to allow students opportunities to move freely and engage directly with their peers, rather than be oriented to the teacher as the arbiter of knowledge. Both focus groups articulated this in their appraisal of the category "using non-traditional methods of arranging students."

Only participants in Focus Group Two also highlighted the importance of restorative justice as a key attribute of social justice teaching. As one member of that focus group articulated,

> So seeing these kids pigeon-holed into the mainstream white curriculum and the behaviors that stem for that, for these little boys of color. And because of that they got a lot of consequences because they weren't what the school expected to fit into the PBIS [Positive Behavior Interventions and Supports] model.

Participants in that group highlighted the importance of examining behavior as relational rather than the attribute of a single ("misbehaving") student. Participants emphasized that this understanding requires discipline practices that address and redress the damage done to interpersonal relationships rather than focus on punishing or redirect the behavior of one student or the other.

Curriculum. In both focus groups, participants identified two aspects of the learning environment as attributes of teaching for social justice. Specifically, participants identified 1) that the curriculum be inclusive and 2) that the curriculum connects to contemporary social issues.

One aspect of the curriculum that both focus groups identified as a key attribute of teaching for social justice was that the materials used in classes reflect the diversity within the broader social context and community. As one participant noted, "Students need to see themselves in the curriculum. The curriculum needs to represent and validate the identities of students." Although this idea was present in both focus groups, the first group focused on who was represented in the texts, highlighting that not only the content of the texts reflect this diversity, but also the authors students are expected to read must

reflect this diversity. In the second focus group, participants emphasized the importance of integrating multiple perspectives into the curriculum. Additionally, the second focus group also emphasized a need to attend to cultural and linguistic diversity, suggesting that using materials and supplies in multiple languages was an important aspect of using a curriculum that reflects the diversity present in the classroom and community was an important aspect of teaching for social justice.

A second aspect of the curriculum that participants in Focus Group Two highlighted as an important attribute of social justice teaching was selecting curriculum that addressed historic and contemporary inequities. **"At my practicum, I can tell the textbook is terrible – it's just a bad textbook from a world language perspective. It's boring, it's not critical. I don't know how students can use it outside the classroom. So I think my step one will be to examine what I have and see how much I can do with the curriculum and the components that relate to social justice." Participants in this group prioritized curriculum that taught the history of oppressed people, connecting those inequities to current issues and injustices.

Pedagogy. In both focus groups, participants identified several aspects of the pedagogy that were key attributes of teaching for social justice. Specifically, participants identified four attributes; 1) critical engagement, 2) student-directed learning, 3) high quality instruction, and 4) hold students to a high academic standard.

In both focus groups, modeling and providing students opportunities to engage in social critiques was identified as one of the most important attributes of teaching for social justice. As one participant summarized while reflecting on their future teaching practice,

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I want to say that social justice in the classroom has been used as a tool, not only

to inform my curriculum, but to help students learn how to think differently or as

[Michael] Apple would say 'to think different.'

In both focus groups, participants highlighted that teaching for social justice required

educators to not only model critical practices, but to provide students both the tools and

opportunities to engage in social change. Members in Focus Group One highlighted the

need to scaffold students' ability to engage in such work through the category "teach

students tools to disrupt unfair power dynamics." Participants in Focus Group Two

emphasized the need for teachers to provide students opportunities to engage in this work

through their ranking of the category "afford students' opportunities to engage in social

change."

Participants in both focus groups also highlighted the importance of allowing

students to be active participants in the classroom. This finding within social justice

pedagogical practices connects to aspects members of both focus groups emphasized

within the context of the broader learning environment, but focuses not on the broader

context for learning, but in how the teacher presents and provides students opportunities

to engage with the curriculum. Members of both groups highlighted that teaching for

social justice required teachers to de-center themselves as the arbiter of knowledge, and

rather provide students opportunities to engage in authentic learning. Participants in

Focus Group One further highlighted that this required teachers to "trust students,"

connecting to the need for educators to build deep, meaningful personal connections with

students.

In both focus groups, participants also highlighted that social justice teaching required educators to be good teachers, critically using evidence-based pedagogical practices in their classrooms. Specifically, participants in Focus Group One highlighted the importance of differentiating instruction (e.g. Tomlinson, 2004), emphasizing the connection between providing students multiple ways of approaching information and culturally responsive and sustaining teaching practices (e.g. Ladson-Billings, 1995; Paris, 2012). Focus Group Two emphasized the importance of developing a "growth mindset" (e.g. Dweck, 2006), seeing this as an antidote to historic discourses about innate intelligence and the connection of that idea to racist and misogynistic ideologies.

Finally, Focus Group Two also highlighted the importance of holding all students to a high academic standards. Participants articulated concern regarding who was pushed to provide more detail, to support their answers, and to receive quality feedback that would provide them opportunities to grow.

Triangulation of Attributes and their Key Indicators

Table 3 summarizes common findings across the document analysis of course syllabi, faculty interview, and graduate student focus groups. Across all data sources, there were several common themes. This section outlines the most commonly cited attributes of social justice teaching and prominent indicators associated with each attribute.

Learning environment. Within the learning environment, several common themes emerged across all data sources. However, in many sources and particularly evident in the faculty interviews, attributes of the learning environment can be subdivided into two sub-categories, the physical classroom and classroom atmosphere.

Table 3.
Social Justice Teaching Attributes by Data Source

| | Syllabi | Interviews | NGT | | Total |
			Focus Group 1	Focus Group 2	
Physical Classroom					
Seating		1	1	1	3
Inclusive decorations		1			1
Student work		1			1
Physical Environment					
Personal Relationship	1	1	1	1	4
Students needs	1		1	1	3
Positive Peer-to-Peer		1	1	1	3
Reflexivity	1		1	1	3
Restorative justice				1	1
Curriculum					
Inclusive	1	1	1	1	4
Social	1	1		1	3
Pedagogy					
Critical	1	1	1	1	4
Student-directed		1	1	1	3
High academic standards	1	1		1	3
High quality instruction	1		1	1	3

Physical learning environment. Within the physical classroom atmosphere, the most identified attribute of teaching for social justice across all data sources was how the physical learning environment was arranged. Both the faculty and the pre-service teachers emphasized the importance of arranging the classroom in such a way as to decenter the teacher as the arbiter of knowledge and to facilitate student-to-student discussions. Key indicators of arranging students for collaborative learning and de-centering the teaching include avoiding arranging desks in rows oriented towards the front of the classroom. Instead, students should be arranged in groups or a circle to facilitate peer-to-peer interactions. Additionally, groupings should be heterogeneous so as

to foster dialogue across different perspectives and avoid allowing or forcing students to sit in segregated groups.

The decorations, posters, and other classroom displays were highlighted as another aspect of the physical learning environment that was an attribute of teaching for social justice. Faculty highlighted that they expect the representations in classroom decorations such as posters and bookshelves to reflect the broader diversity in the community or signify solidarity with individuals from historically marginalized groups. Key indicators of social justice teaching through the classroom decorations included diverse representations on posters, book displays, and other semi-permanent media. Inclusive classroom decorations would also be indicated by an absence of stereotypical depictions of individuals from historically marginalized groups, as research has shown such depictions may be more harmful than no depiction at all (e.g. Steele & Aronson, 1995).

Interviewees emphasized that student work should be prominent in the classroom and free of judgement. Key indicators included that such work be displayed in the classroom. Additionally, participants indicated that student work should be prominently displayed as posted it in the back corner of the classroom, opposite where student attention is directed, would indicate that such work as of less importance. Displays of students' work should be inclusive of all students, providing each child in the classroom an opportunity to be recognized. To do so, students should be allowed an opportunity to demonstrate a variety of skills, avoiding rewarding only students who meet some narrow external standard. Finally, student work should be free of value judgements, avoiding

highlighting this (and only this) work as "good" or "excellent" and instead celebrate what students can and have accomplished.

Classroom Atmosphere. Within the context of the broader classroom atmosphere, the most prevalent attributes were 1) the need for educators to invest in deep, meaningful relationships with their students, 2) the need for teachers to attend to students' needs, and 3) the need to model and provide students opportunities to engage in positive peer-to-peer interactions.

Prevalent across all data sources was the importance of educators developing meaningful relationships with their students. Key indicators include, at the very least, knowing and referring to students by name, demonstrating that the teacher has taken the time to know each and every student who comes into their classroom. Additional key indicators include greeting students as they come into the classroom and inquiring about non-academic issues. Teachers should know students' interests and their experiences and use this knowledge to connect curriculum to students' lives.

In both of the teacher-candidate focus groups and within the course syllabi there was an emphasis on the importance of attending to students' needs. Significantly, a key aspect of this is attending to the social and emotional well-being of students. Key indicators of this include allowing and encouraging students to express their identities, points of views, opinions, and personal experiences in class discussion and course work. Additionally, educators should validate students' emotions, particularly negative emotions in relation to academic tasks and challenges. Educators should also demonstrate a sense of openness and humility, admitting their own fallibility. Finally, teachers should demonstrate their appreciation of student engagement and contributions to class.

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Finally, both the faculty and graduate students emphasized the importance of facilitating positive peer-to-peer interactions, providing students the supports and opportunities to work and communicate with each-other. Key indicators included educators modeling, demonstrating, explaining, and providing students' opportunities to take different viewpoints in order to foster better understanding of alternative interpretations. Additionally, teachers should model and provide opportunities for reflexive practices and student self-awareness. Educators should also engage students in social learning strategies. When conflict does occur, educators should help students engage in collaborative conflict resolution skills such as restorative justice practices.

Curriculum. Within the curriculum, two common attributes of teaching for social justice were identified. These included, 1) the usage of a curriculum that was inclusive and 2) the implementation of a curriculum that connects to contemporary social issues meaningful to students.

Similar to the classroom displays, the idea that curriculum should be inclusive of the diversity prevalent within the broader social context of learning was highlighted across all data sources. Participants emphasized that, although it was important that curriculum include diverse representations within the texts, it should also emphasize other types of knowledges. Key indicators of an inclusive curriculum echoed many of the findings of classroom decorations outlined within the context of the physical environment. Similar to these visual displays, utilizing inclusive curriculum requires educators to be purposive in both what is and what is not included within the texts used in the course. A significant indicator of engagement in realizing social justice teaching through the curriculum would be the representations present in texts, stories, illustrations,

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and other learning materials. Additionally, inclusive curriculum would also be indicated by an absence of stereotypical depictions of individuals from historically marginalized groups.

Second, in both the syllabi, faculty interviews, and one of the two focus groups, using curriculum that connects to contemporary social issues was identified as an important attribute of teaching for social justice. Participants felt that learning materials should purposefully connect to issues that were meaningful to students. Key indicators of such socially engaged curriculum would be materials that taught curriculum concepts and ideas within the context of current issues, leveraging each learning opportunity as a moment to engage community challenges and issues. Additionally, connecting to the broader social context of learning would be an additional indicator of socially relevant curriculum.

Pedagogy. Within the pedagogy domain, participants identified three key attributes of teaching for social justice. These included 1) modeling and providing students opportunities to engage in critical practices, 2) focusing on student-directed inquiry, and 3) holding all students to a high academic standard.

Across all data sources, the most cited attribute of social justice teaching within teacher pedagogical practices was modeling and providing students opportunities to engage in critical practices. Participants indicated that this included such tasks as critiquing the text for what was and was not present, engaging social issues within the broader community, and juxtaposing content-area learning with civic engagement. Key indicators of this attribute include educators modeling and providing students opportunities to make text-to-text, text-to-self, and text-to-world connections. Teachers

should demonstrate and scaffold students' engagement in analyzing prevailing, dominate cultural interpretations of curriculum and facilitating the production of alternative interpretations of the text. Finally, educators should push students, challenging them to defend these alternative interpretations of the text.

Participants also indicated that social justice teaching was often synonymous with providing students more opportunities to be co-producers of knowledge and that educators should provide students opportunities to be in charge of their own learning. Key indicators of this attribute included facilitating students working together rather than independently or competitively. Educators should also model and provide students opportunities to experience inquiry as a goal rather than just a method of learning. Teachers should also demonstrate and explain how to use active listening skills and respect multiple perspectives. Finally, educators should engage proactive strategies to ensure all students have equal opportunities to engage in class.

Another key aspect of social justice pedagogy identified within the course syllabi, faculty interviews, and in one of the two focus groups was holding all students to a high academic standard and providing fair, equitable, differentiated, and personally useful feedback to all students. Key indicators of this included providing all students honest feedback, highlighting both positive aspects of the work and opportunities for improvement. Additionally, feedback should be distributed according to the needs of the students, providing all students opportunities for growth while neither over-whelming nor under-whelming each individual.

Postulate II: There Is an Abstract-Machine of Language That Does Not Appeal to

Any 'Extrinsic' Factor

In order to attend to the second research question (Is it possible to consider the philosophical limitations of the assessment development process in a way that allows social justice to retain its liberatory potential?) I report the results of mapping the first phase of the assessment development process onto Deleuze and Guattari's (1980/1987) second postulate of linguistics, the assumption that there is an abstract-machine of language that does not appeal to any 'extrinsic' factors. Within the procedures of a royal science, the process of defining social justice is predicated on a logic of extractions (e.g. Mazzei, Graham, & Smithers, 2018) that presupposes *a priori* categories into which behaviors can be grouped; that is, the categories presuppose the individual attributes of teaching for social justice. Whether it is the identification of practices within the extant literature (Chapter II), or document analysis of course syllabi, coded responses from faculty, and the rank-ordering of practices by pre-service teacher participants (Phase One), there is a presupposition of a commonality or universality to this series of discrete practices that transcends the individual expressions. These abstracted categories are in excess of the framework used to organize them (O'Brien, Stewart, & Moje, 1995), as it is to the commonality through which each expression can be categorized – the titular 'extrinsic' factor.

Rather than attempt to trace this transcendent ideal (the aim of a royal science), a minor science allows us to better understand a piece of scholarship and what it might do by *mapping* both the concrete *machinic assemblages of bodies* and the *collective assemblage of enunciation* through which the resultant significations function. Those

attributes of the machinic assemblage that are encapsulated by these particular

instantiations of social justice include institutions such as research organizations (e.g. the

American Educational Research Association, the American Psychology Association, the

National Council on Measurement in Education who have set the parameters on how

such an assessment should be developed, the American Association of Colleges of

Teacher Education who oversee the *Journal of Teacher Education*) and academic

institutions, such as the University of Oregon, through which such scholarship is made

possible.

These institutions function as substance of content in some aspect, as physical

entities themselves, but also dictate the form of the machinic assemblage of bodies –

social hierarchies of which striate individuals into castes of student, candidate, faculty,

instructor, researcher, scholar, editor, and reviewer. These hierarchical structures are

necessary for both the distillation of social justice teaching practices as a subject of

research and for the deployment of such practices in the classroom. The development of

the TSJFA requires an authority derived from such intuitions (the authority to validate

procedures, to accept and publish research, to grant degrees), and a site for its

deployment (academic institutions for the training of educators, schools at which teachers

interact with students).

Simultaneously there is an interplay with those aspects of the concrete machinic

assemblages of bodies and the attributes of the collective assemblage of enunciation – the

constellation of *order-words* that allows for such scholarship to exist and effectuate; the

University is a sign with two sides. On the one, the physical structures, the faculty, the

students, organized in an arrangement nearly unchanged for a millennia (Pendersen,

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1997) – the form and substance of content. Simultaneously, on the other side the University is enmeshed with other order-words such as the laws that afford the institution its power to grant degrees (the incorporeal act of graduating). These include the substances of expression such as those denoting status and authority ("doctor," "student," "professor," "dean"); a title is an order-word commanding respect or rebellion. Bestowing a degree is effectuating an incorporeal transformation of the machinic assemblage. Research also goes through such an incorporeal transformation, a change that goes from ideas captured in a draft to something more or less calcified, published, and catalogued.

Within the present project, social justice, as a sign, functions in the interplay of both substances and forms of content and expression, in relation to the ways in which bodies intermingle with those order-words that effectuate their incorporeal transformations. A teaching practice is both a form of content and substance of expression (the organizational structure of the machinic assemblage of bodies and significations). The categorization of practices is only the form of expression, the classification of practices as attributes of teaching for social justice or not. Those practices can only become read as equitable in relation to other significations and their effect on the body.

The aim of examining the form and substance of content and expression – the machinic assemblage of bodies and the collective assemblage of enunciation – is not to provide new fixed points of references to aid in the royal science project of calcifying social justice as a discreet set of teaching practices. Nor is the purpose to catalogue all

aspects of the sign as in some Laplacian (1795/1902) aim at omniscience[5]. Rather, this exploration helps contextualize the circumstances through which it becomes possible to extract and calcify teaching for social justice, attending to the confluence of events and interests through which such a project acquires the capacity to effectuate incorporeal transformations; the circumstances in which social justice becomes actual.

Several key points emerge in such an analysis. First, the development of the TSJFA requires an acknowledgement of inequity in excess of the individual instances of exclusion of violence; in order for justice to be meaningful, there is a need for a conception of injustice at a systemic level. If there were only ever individual acts of violence, such systemic reform would not be possible; justice as a sign cannot function without the form and substance of expression into which it can connect. Those aspects of the collective assemblage of enunciation that allow social justice to become meaningful also function in relation to the form and substance of content; justice, as a concept, is only tenable within the context of historical and ongoing injustice. Histories of oppression and exclusion are both actual and virtual; a bruise is as much a sign or *order-word* as it is a physical wound felt on the body.

Second, attending to those attributes of the machinic assemblage of bodies and collective assemblage of enunciation allows for us to reconceive the philosophical limitations of the present project. As discussed in Chapter I, in order for a royal science or traditional research, to function, it requires the adoption of a set of philosophical presuppositions; assumptions that afford only a particular epistemological and

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[5] "Given for one instant an intelligence which could comprehend all the forces by which nature is animated and the respective situation of the beings who compose it – an intelligence sufficiently vast to submit these data to analysis – it would embrace in the same formula the movements of the greatest bodies of the universe and those of the lightest atom; for it, nothing would be uncertain and the future, as the past, would be present to its eyes" (p. 4).

ontological foundation. The use of true-score theory (Lord, 1964), the use of a quantitative dominate sequential mixed-methods study design (Johnson & Onwuegbuzie, 2004), the examination of teaching practices through the framework provided by O'Brien, Stewart, & Moje (1995), are all predicated on specific foundational assumptions, pulling largely from a post-positivist philosophic tradition (Popper, 1967). Within the framework of a royal science this foundation makes it possible to conduct this project but also serves a limiting function, allowing only for the generation of a certain form of knowledge production. By turning to a minor science these points of reference are no longer fixed points, but the form of expression; the epistemic foundation of social science inquiry is not fixed, but instead is a conditional structure that attenuates the function of the sign in relation to the concrete assemblage of bodies. Treating these foundational assumptions as an attribute of the sign rather than an *a priori* presupposition allows a reconception of research functions in relation to the established order of the academy.

Finally, as result of both how a royal science allows for the definition of the question of social justice and the philosophical assumptions that allow for the amelioration of the underlying inequities, social justice, within the context of a royal science cannot be radical; Marx (1978/1844) acknowledges as much. The tension here is not between the radical and the mundane, but the radical and the intelligible; in order for social justice (as a sign) to have the capacity to effectuate, it must be intelligible within the established order of the sign (the form of expression). The fundamental issue, as Marx elucidates, is that rather than emancipatory, defining justice through those tools that we have at our disposal reifies those very systems that precipitate and sustain inequity:

But the political suppression of private property not only does not abolish private property; it actually presupposes its existence. The state abolishes, after its fashion, the distinctions established by birth, social rank, education, occupation, when it decrees that birth, social rank, education, occupation are non-political distinctions; when it proclaims, without regard to these distinctions, that every member of society is an equal partner in popular sovereignty, and treats all the elements which compose the real life of the nation from the standpoint of the state. But the state, none the less, allows private property, education, occupation, to act after their own fashion, namely as private property, education, occupation, and to manifest their particular nature. Far from abolishing these effective differences, it only exists so far as they are presupposed; it is conscious of being a political state and it manifests its universality only in opposition to these elements. (ibid. p. 33).

The very idea of teaching for social justice is founded upon a series of assumptions that are necessary to the royal science of teaching for social justice, but antithetical to redressing the foundational problem of justice.

Phase Two: Item Construction and Review

In order to answer the second sub-question of the first research question (are those attributes relevant and necessary to teaching for social justice, and if so, is it possible to categorize them within an extant framework for organizing teaching practices?), in this section I report the results of the second phase of the assessment development process, item construction and review. A test blueprint (AERA, APA, & NCME, 1999) was designed to align key indicators with each attribute of social justice teaching emphasized

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in Phase One of the project and across the three domains outlined by O'Brien, Stewart, & Moje (1995), with "learning environment" segmented into the physical learning environment and classroom atmosphere. The test blueprint is presented in Appendix G. From this test blueprint, a draft set of items was constructed. Notably, the attributes and indicators associated with educators modeling and providing opportunities for students to engage in reflexive practices was found to align with the attribute relating to addressing students' needs within the classroom atmosphere domain, and were combined. Restorative justice practices, although identified as an important aspect of teaching for social justice, were omitted as it was determined that the occurrence of incidents requiring such practices would be irregularly observed. Finally, although high-quality instruction was identified as an attribute of teaching for social justice, it was omitted as several extent instruments (e.g. edTPA; Pearson Education, 2019) have been developed and validated for evaluating such teaching practices.

The remaining attributes and indicators were subjected to review by Ph.D. students and candidates within the Department of Education Studies. Out of the 23 potential reviewers, 16 participants completed the online survey. Of the 16 participants, 15 completed the items pertaining to the content validation index and content value ratio, 14 completed all of the items pertaining to the factor validity index, and five provided qualitative feedback regarding other attributes and key indicators of social justice teaching. The content validation index and factor validity index for each attribute is presented in Table 4.

Table 4.
Item Review Survey Results

	CVI	CVR	FVI	
			4 domain	3 domain
Physical environment				
Inclusive decorations	.92	-.13	.33	.80
Student work	.89	-.13	.27	.86
Seating	.86	.38	.53	.73
Atmosphere				
Peer engagement	.80	.13	.53	.67
Relationship	.87	.50	.40	.40
Student needs	.88	.63	.27	.33
Curriculum				
Inclusive	.92	.63	.67	.67
Socially relevant	.91	.38	.67	.67
Pedagogy				
Student-directed	.83	.25	.80	.80
Critical	.86	.50	.73	.73
Feedback	.85	.60	.53	.53

Content Validation Index

To estimate the content validation index (CVI) for each item, the number of experts who rated the item as either a three or a four (somewhat relevant or quite relevant) were counted and divided by the total number of participants (Polit & Beck, 2006). To calculate the CVI for the scale, the average was calculated across all items, as outlined in Chapter III. For attributes in the physical environment domain, the CVI scores ranged from .86 to .92. For attributes in the classroom atmosphere domain, CVI scores ranged from .80 to .88. For attributes in the curriculum domain, CVI scores ranged from .91 to .92. Finally, for items in the pedagogical domain, CVI scores ranged from .83 to .86. The average CVI score for all items, or scale-level CVI, was .87, well above the .80 criteria. Additionally, all items were above .80, suggesting consensus amongst reviewers

regarding the relevance of each attribute to the broader concept of teaching for social justice.

Content Value Ratio

To estimate the content value ratio (CVR) for each item, half the number of raters was subtracted from the number of experts who rated the item as essential, the sum of which was divided by half the number of raters, as outlined in Chapter III. Given the *n* for the present sample (16), Wilson, Pan, & Schumsky (2012) suggest acceptable cut-score of .375, whereas Ayre & Scally (2013) recommend a more conservative cut-score of .50.

For attributes within the physical environment domain, CVRs ranged from -.125 to .375. Both the attributes relating to classroom decorations and to student work scored -.125, suggesting a minority of raters felt these were necessary attributes of teaching for social justice. The arrangement of students within the classroom was scored .375, at the more liberal cut-score for Wilson et al. (2013) and below the more conservative threshold posited by Ayre & Scally (2013).

For attributes within the classroom atmosphere domain, CVRs ranged from .125 to .625. The attribute for modeling and providing students opportunities to engage in positive peer-to-peer interactions scored .125, below both thresholds. Both the attribute for teacher developing close personal relationships with students and the attribute for educators addressing the physical, social, and emotional needs of students score above both thresholds at .50 and .625 respectively.

Within the curriculum domain, scores ranged from .375 to .625. The attribute for selecting curriculum that included diverse representations was scored .625, above both

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thresholds. The attribute for selecting curriculum that engages contemporary social issues was scored at .375, at the more liberal threshold proposed by Wilson et al. (2012), but below the .50 threshold proposed by Ayre & Scally (2013).

Within the pedagogy domain, scores ranged from .25 to .60. The attribute for implementing student-directed inquiry was scored .25, below both thresholds. Both the attribute for modeling and providing students opportunities to critically engage social issues through learning and the attribute for providing students with fair, meaningful, and equitable feedback were scored above both thresholds at .60 and .50 respectively.

Factor Validity Index

In general, participants had difficulty aligning each attribute within the various domains outlined by O'Brien, Stewart, & Moje (1995), even after collapsing "physical environment" and "classroom atmosphere" back to the original "learning environment" domain. If using the proposed four-domain modeling, differentiating attributes of the physical learning environment from the general classroom atmosphere, then the only item to score above the proposed .80 threshold was the pedagogical attribute for allowing students to engage in student-directed inquiry. Within the original three-domain model, participants aligned inclusive decorations and student work as attributes associated with the learning environment at .80 and .86.

Test Development

The results of the item review survey were used to revise items and indicators on the TSJFA by incorporate suggestions made by participants. Items that scored between the two recommended CVR thresholds (scoring between .375 and .50) were revised using minor revisions that mostly included adjusting key indicators using feedback from

participants. Items that scored below the more liberal threshold suggested by Wilson et al. (2012) were re-written using both feedback from participants in Phase Two, in addition to incorporating additional ideas and notes from Phase One and Chapter II. The two lowest scoring items, the use of inclusive decorations and displaying student work in the classroom (both of which were the only two items to obtain a negative score) were revised but included as they are quick, easy, and reliably scored as they require only a quick appraisal of the physical environment. However, given the low scores, results in Phase Three are reported both with and without these attributes. This iteration of the TSJFA is presented in Appendix I.

Building on foundational work in classroom observation protocols (e.g. Fraser, 1998; Fraser & Walberg, 1991), the TSJFA was modeled off several extent classroom observational assessments, including the Measure of Instruction for Creative Engagement (Pitts, Anderson, & Haney, 2018), and the Learning Environment Inventory and Individualized Classroom Environment Questionnaire (Fraser, 1982). Rubrics were constructed for all items related to each of the 11 attributes across the three domains outlined by O'Brien, Stewart, & Moje (1995) with the "learning environment" domain subdivided into physical environment and classroom atmosphere. Items on the TSJFA were constructed using the key indicators identified by participants in Phase One and validated by participants in Phase Two of the present study. A five-point analytic rubric (Moskal, 2000) was selected with levels aligned with the degree to which the selected key indicators were present in the classroom, ranging from 1 – not present, to 5 – developed. Given the use of a 5-point scale and the ongoing debate regarding the precise level-of-measurement qualities of such items (e.g. Kenny, 1986), results are reported

under the assumption that the data are ordinal when appropriate (e.g. in factoring

Krippendorff's alpha), as this makes fewer assumptions regarding the underlying

distribution of the data and generally reports more conservative and less-biased estimates

(De Swert, 2012).

Postulate III: There Are Constants or Universals of Language That Enable Us to

Define It as a Homogeneous System

In order to answer the second research question (Is it possible to consider the

philosophical limitations of the assessment development process in a way that allows

social justice to retain its liberatory potential?) I next report the results of mapping the

item construction and review process onto Deleuze and Guattari's (1980/1987) third

postulate of linguistics, the assumption that there are constants or universals of language

that enable us to define it as a homogeneous system.The distillation of teaching for social

justice into discrete attributes that are observable in the classroom is an example of how a

royal science functions by dividing a continuous system into discrete units. The

messiness of teaching for social justice, the pragmatics of the continuously infinite[6]

possibilities of actions redressing systemic inequities, is reduced to a finite series of

classifications. Sets of possible practices are grouped according to the presumed

constants or universals that allow them to be considered the same – the homogeneous

system.

Attempts at quantifying content validity (e.g. Lawshe, 1975), as done in Phase

Two of the present project, exemplify a royal sciences' emphasis on homogeneous

systems. Within the royal science, attributes of social justice teaching are extracted from

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[6] Infinite not in that it is inclusive of all practices, but the infinitely continuous constellation of practices which are teaching for social justice (the virtual teaching for social justice).

published works, documents, interviews, and focus groups and overcoded according to an extent theoretical framework. From the heterogeneous body of literature is extracted the presumed homogenous constants. The expert panel, the rational arbiters, are then tasked with evaluating the veracity of the results. Below a certain threshold the work is invalid, an unfaithful reproduction. Above the threshold and there is evidence to suggest content validity. The project is Platonic in nature, for what is this mode of validation but the predation of "*phantasmatic simulacr[a]*" (Sophist, 236)? The omnipresent danger within traditional research is to be the illegitimate copy; to offer a representation that either distorts or is untethered from reality. As Lee Chronbach (1980) asserts, "the job of validation is not to support an interpretation, but to find out what might be wrong with it" (p. 103).

Such scholarship opens itself up to critique regarding the demarcation of those indicators; the Derridean *hinge* (Derrida, 2016/1967), or indeterminable point of differentiation where an indicator no long functions as an aspect of one attribute, but as an aspect of another. It is in those liminal spaces that the seemingly arbitrary distinction between classifications become apparent; where is the line between what is and is not considered a social justice teaching practice, and why here and not somewhere else? A body of scholarship exists that has sought out these arbitrary boundaries in order to disrupt the presumption of fixity or ontological stability that often serves as the object of inquiry, if indirectly, within a royal science[7].

Deconstruction is not the antidote to a royal or traditional social science inquiry, however. While the former seeks to create a constant out of the collective assemblage of

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[7] Despite modern social science's foundation in post-positivism (e.g. Popper, 1963), there exists still this appeal to a transcendent ideal, if in *reductio ad absurdum* (Dawson, 1997).

enunciation, the latter creates constants out of the machinic assemblage of bodies (social justice either becomes something defined or something undefinable). What a minor science allows us to do is consider the circumstances through which social justice, calcified as a discrete set of practices, can become meaningful, and for whom (the problem of social justice). Disrupting the notion that there are universals that allow social justice teaching practices to be defined as a homogenous system allows us to explore the event of social justice, "to place the statement in continuous variation is to send it through all the prosodic, semantic, syntactical, and phonological variables that can affect it in the shortest moment of time" (Deleuze & Guattari, 1980/1987, p. 94).

In order to intervene in this quixotic process of validation without creating a constant out of the form and expression, I follow Deleuze and Guattari's critique of Chomsky's universal grammar as what both Chomsky and this research uncover are not the deep structures abstracted out of heterogeneous elements, but simulacra. They are simulacra not because the attributes are unfaithful copies but because there was never the possibility of faithful reproduction, there was only ever theft. "The simulacrum is never that which conceals the truth—it is the truth which conceals that there is none. The simulacrum is true" (Baudrillard, 1994, p. 1).

The problem with research seeking to triangulate the homogenous out of heterogeneous systems, parallel the problem of Chomsky's search for deep grammatical structure, is not that it is too abstract, but that it is "not abstract enough" (Deleuze & Guattari, 1980/1987, p. 90). That is, neither reaches the abstract machine that connects what a language is to what a language does. "The abstract machine as it relates to the diagram of the assemblage is never purely a matter of language, except for lack of

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sufficient abstraction. It is language that depends on the abstract machine, not the reverse" (Deleuze & Guattari, 1980/1987, p. 76). Abstracted universals are produced by extracting constants out of the substance and form of expression – by overcoding structure over variation. That which does not fit the model is relegated to the outside. However, one cannot simply turn away from structure and towards the pragmatic without the risk of extracting constants out of the substance and form of content – the limitation of post-structural linguistics (Bell, 2018, p. 77). Instead, what Deleuze and Guattari suggest is a minor research that explores abstraction at the level of abstract machines, exploring the co-constitutive variations of content and expression through which language functions. "To place the statement in continuous variation is to send it through all the prosodic, semantic, syntactical, and phonological variables that can affect it in the shortest movement of time" (Deleuze & Guattari, 1980/1987, p. 94). Here we can see both language and research as a process, not product. The constant does not presuppose variation, but instead is merely the territorial side of the assemblage. Within the context of this research, I attend to this process by turning away from this territorial side of averages and means and instead look at both the variances from which these constants are abstracted and the knowledge which is amputated by orienting the assemblage towards the constant.

In considering these two sides of the assemblage – the territorial and the cutting edge of deterritorialization (Deleuze & Guattari, 1980/1987, p. 57) – we are left with two different orientations regarding how to conceptualize results. On the one hand, we can aspire to produce a faithful copy and allow these deterritorialized elements to be subsumed by the mundane – the apparatus of capture of a royal science. On this front,

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this project succeeds as the necessary threshold for the Lawshe test is met. The devised framework defining what practices exemplify social justice teaching, as extracted from the extant literature, sufficiently captures to construct of interested to meet the established criteria for content validity according to the expert panel. Conversely, we can look at the data as simulacra, turn away from the transcendent ideal, and attend to this process of a becoming-minor research. We can look beyond abstraction to the level of the constant and move to the constant productive process of variation at the level of the abstract machine.

In reorienting research towards this productive process, we move from attending to the constant to diffusion and variation. Rather than examining the aggregate – looking for the constant out of our heterogeneous results – we can see the unique patterns of how these experts "plug in" to this process. What emerges is a different story than the aggregate, one in which each scholar differently adjudicates each indicator. These unique patterns disappear in the aggregate, as the sum of these scores is both in excess of and less than its parts – overcoding the constant over the heterogeneous.

It is at the extremes of these data that we can find particularly destabilizing results. One reviewer provides a point of disruption in this process of reterritorialization by identifying all indicators as not necessary components of social justice. Furthermore, within a section on the survey where reviewers are encouraged to provide qualitative feedback regarding other important indicators omitted from the survey, the same anonymous outlier offered this:

> I completed the survey and responded thoughtfully, but I'm somewhat concerned
> with the initial premise of this research…When this formative tool is

implemented, how will the results be used? Will it be a teacher-driven process used primarily for self-reflection, or an evaluative process of some sort? Within traditional methods, this respondent's concerns are noted and carry weight, but only as a single data point in relation to the responses of other experts. This respondent's scores exert an influence on the overall result, but only fractionally, and ultimately they do not disrupt the final conclusion.

But by examining the heterogeneous rather than the homogenous, this bit of datum can interrupt this process of reterritorialization. Instead of functioning merely as variance within a statistical model, this response destabilizes both the methods and results. At the level of method, we can see how this reviewer fails to conform to the intended function of the assessment, particularly in responding to the qualitative question regarding additional indicators. Rather than respond to the question of capture of a royal science ("what is social justice"), this reviewer improvises by deterritorializeing the method and refusing the question. Instead, they reframe the project around the problem of social justice: "What are the connections that constitute it, and what further connections are made possible and impossible?" (Atkins, p. 9). By doing so, this response cuts across both the impetus of the project and its results. As an interjection at the level of the problem rather than the question, this response disallows for an easy settlement on this logic of extraction, one which is content to overcode the constant over the heterogeneous. Reorienting research such that this result becomes the focus rather than excess necessitates attending to the problem of social justice, not just the question.

Phase 3: Pilot Test

In the final phase of the assessment development process, pilot testing the assessment, I answer the third sub-question of the first research question, Can an assessment designed to provide in-service and pre-service educators feedback on the presence of such attributes of teaching for social justice be scored reliably and do how do the items function? A total of six research assistants were recruited to assist in pilot-testing the TSJFA. Research assistants were provided a handbook that addressed the underlying assumptions, development, and scoring procedures of the TSJFA before training and scoring began; I present the TSJFA scoring handbook in Appendix J. Participants were then provided two hours of training, culminating in team-scoring two sample videos. Inter-rater agreement, using Krippendorff's alpha, was unsurprisingly high (*Kalpha* = .73) given the sample videos were selected for specific indicators associated with various attributes and that participants were provided nearly 20 minutes to discuss their rationale for scoring each attribute. After the initial training, research assistants scored 30 sample videos over a total of four sessions ranging from two to three hours in length. Initially, participants were provided a few minutes after scoring each video to articulate their scores and discuss points of disagreement or ambiguity. However, by the last observation session, participants were able to score near-unanimously with little or no discussion. The average score on the TSJFA in addition to average score by attribute and domain are presented in Table 5.

Table 5.
Pilot-test Descriptive Statistics by Attribute, Domain, and Overall TSJFA

	Mean	SD	Median	Scale Range		Observed Range	
				Min	Max	Min	Max
Physical environment sum	7.34	2.77	7.38	3	15	3	13.40
Physical environment mean	2.47	0.91	2.46	1	5	1	4.47
Inclusive decorations	1.81	1.24	1.00	1	5	1	5
Student work	2.14	1.14	2.00	1	5	1	4.75
Seating	3.48	1.56	4.17	1	5	1	5
Atmosphere sum	8.32	3.15	9.13	3	15	3.17	13.67
Atmosphere mean	2.69	1.07	3.04	1	5	1	4.56
Peer engagement	2.84	1.33	2.25	1	5	1	5
Relationship	2.72	1.10	2.58	1	5	1	5
Student needs	2.76	1.17	3.00	1	5	1	5
Curriculum sum	3.38	2.44	2.21	2	10	2	9.5
Curriculum mean	1.78	1.33	1.10	1	5	1	5
Inclusive	1.63	1.24	1.00	1	5	1	5
Socially relevant	1.75	1.26	1.00	1	5	1	5
Pedagogy sum	8.38	2.79	8.88	3	15	3.75	14
Pedagogy mean	2.78	1.00	2.96	1	5	1	4.67
Student-directed	3.25	1.15	3.42	1	5	1	5
Critical	1.84	1.24	1.00	1	5	1	5
Feedback	3.30	1.29	3.21	1	5	1	5
TSJFA Sum	27.41	7.35	28.00	11	55	15.25	41.80
TSJFA Mean	2.49	0.67	2.55	1	5	1.39	3.80

Interrater Reliability

In order to assess agreement between raters, I used both Krippendorff's alpha and the interclass correlation. I present the results of both analyses for the individual items and subscales in addition to the overall TSJFA in Table 6.

Krippendorff's alpha. Krippendorff's alpha was factored for each item, domain, and the overall TSJFA using code developed by Proutskova (2017) within *r* open source software (R Core Team, 2013). The results are presented in Table 10. Interrater agreement was high for the sum scores on the TSJFA, *Kalpha* = .91, 95% CI [.89, .93].

Interrater agreement was also high for each individual domain, *Kalpha* ranging from .80

to .91. There was more variability in interrater agreement at the attribute level, with

Kalphas ranging from .75 to .87.

Table 6.
Krippendorf's Alphas and ICC(2,k) by Attribute, Domain, and Overall TSJFA

	Krippendorff's alpha			ICC(2,k)		
		95% CI			95% CI	
	Mean	Low	High	Mean	Low	High
Physical environment	.91	.89	.93	.98	.97	.99
Decorations	.87	.81	.91	.97	.95	.98
Student work	.85	.80	.89	.97	.95	.98
Seating	.76	.70	.81	.97	.95	.99
Classroom atmosphere	.86	.83	.89	.98	.97	.99
Peer engagement	.80	.83	.86	.97	.95	.98
Relationship	.78	.73	.82	.95	.92	.97
Student needs	.75	.69	.81	.95	.91	.97
Curriculum	.80	.75	.85	.99	.99	1.00
Inclusive	.87	.80	.93	1.00	.99	1.00
Socially relevant	.81	.75	.86	.98	.97	.99
Pedagogy	.84	.78	.87	.97	.95	.98
Student-directed	.77	.73	.81	.95	.92	.98
Critical	.80	.74	.86	.96	.94	.98
Feedback	.75	.68	.81	.95	.91	.97
TSJFA Overall	.91	.89	.93	.98	.96	.99

Interclass correlation. The interclass correlation for each item, domain, and

overall TSJFA assessing agreement between 6 raters assumed to be randomly selected

from a larger population of potential raters to the average of all raters – ICC(2,k) (Shrout

& Fleiss, 1979) – was calculated using the *psych* package (Revelle, 2010) in *r* open

source software (R Core Team, 2013). The results are presented in Table 6. For the

overall TSJFA, interrater agreement was excellent, ICC(2,k) = .98, 95% CI [.96, .99].

Interrater agreement was also high for each individual domain, ICC(2,k) ranging from .97

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to .91. There was slightly more variability in interrater agreement at the attribute level, but all were excellent, ranging from .95 to 1.00.

Item Function

Item reliability. The item reliability index (IRI) was factored by taking the product of variability in item score and the item score correlation with overall performance. IRI by attribute across the TSJFA ranged from .01 to 1.04. I present the IRI results by attribute are reported in Table 7.

Table 7.
Item Discrimination and Reliability Index

	Discrimination	IRI
Physical environment		
Inclusive decorations	.01	0.01
Student work	.25	0.29
Seating	.50**	0.78
Classroom Atmosphere		
Peer engagement	.78**	1.04
Relationship	.73**	0.80
Student needs	.77**	0.90
Curriculum		
Inclusive	.26	0.32
Socially relevant	.40*	0.50
Pedagogy		
Student-directed	.82**	0.94
Critical	.50*	0.62
Feedback	.67**	0.86

Notes. * $p < .05$, ** $p < .01$

Within the physical environment domain, IRI ranged from .01 to .50. The IRI for the attribute relating to the presence of inclusive decorations was quite low, IRI = .01. The IRI for the attribute regarding the presentation of student work within the classroom was better, IRI = .29. The attribute regarding the arrangement of students to facilitate

group interaction had the highest IRI of any attribute within the physical environment domain, IRI = 0.78.

Within the broader classroom atmosphere domain, IRI ranged from 0.80 to 1.04. IRI for the attribute related to modeling and providing students opportunities to engage in positive peer-to-peer interactions was 1.04, while the IRI for demonstrating a close teacher-student relationship was 0.80, and the IRI addressing the physical, social, and personal needs of students was .90.

In the curriculum domain, the IRI ranged from .32 to .50. The IRI for the attribute relating to the use of curricular materials that contain representations reflective of the diversity present in the broader social context was 0.32. The IRI for the attribute using curricular materials that connect to contemporary social issues was 0.50.

Within the pedagogy domain, IRI ranged from .62 to .94. The IRI for the attribute related to using student-directed inquiry was .94. The IRI for the attribute relating to modeling and providing students opportunities for critical engagement was .62. The IRI for the attribute related to providing meaningful and equitable feedback to students was .86.

Item discrimination. Item discrimination was factored using the correlation between the attribute score averaged across raters and overall score on the TSJFA for each video observation. Given that the item-level data would most appropriately be considered ordinal, Spearman rank-order correlations (Spearman, 1904) were used as this would make fewer distributional assumptions regarding the item-level data; providing a more conservative and potentially less-biased estimates. I present item discrimination

values in Table 7. Item discrimination by attribute across the TSJFA ranged from .01 to .82.

Within the physical environment domain, item discrimination ranged from .01 to .50. The presence of inclusive decorations did not discriminate between individuals who performed high or low on the TSJFA, $r_s = .01$, $p > .05$. Performance on the attribute regarding the presentation of student work within the classroom did positively correlate with overall test performance, but this relation was not statistically significant, $r_s = .25$, $p > .05$. The attribute regarding the arrangement of students to facilitate group interaction had a statistically significant relation to overall performance on the TSJFA, $r_s = .50$, $p < .01$.

Within the broader classroom atmosphere domain, all attributes had a statistically significant positive relation to overall test performance. Item discrimination for the attribute related to modeling and providing students opportunities to engage in positive peer-to-peer interactions was .78, $p < .01$, for demonstrating a close teacher-student relationship was .73, $p < .01$, and addressing the physical, social, and personal needs of students was .77, $p < .01$.

In the curriculum domain, item discrimination ranged from .26 to .40. The attribute relating to the use of curricular materials that contain representations reflective of the diversity present in the broader social context was not significantly related to overall test performance, $r_s = .26$, $p > .05$. Item discrimination for the attribute using curricular materials that connect to contemporary social issues was statistically significantly related to overall test performance, $r_s = .50$, $p < .05$.

Within the pedagogy domain, item discrimination was statistically significant for all attributes and ranged from .50 to .82. The attribute related to using student-directed inquiry had a strong relation with overall performance on the TSJFA, $r_s = .82$, $p < .01$. The item discrimination for the attribute relating to modeling and providing students opportunities for critical engagement was .50, $p < .05$. The attribute related to providing meaningful and equitable feedback to students was .67, $p < .01$.

Cronbach coefficient alpha. Cronbach's coefficient alpha was factored for each domain and the overall TSJFA using the *psych* package (Revelle, 2010) in *r* open source software (R Core Team, 2013). I report the results and change to the domain Cronbach alpha if any one item was removed in addition to the overall TSJFA Cronbach alpha, the TSJFA mean, and the TSJFA variance if the item were deleted in Table 8. In general, Cronbach alpha values from .70 to .80 suggest satisfactory internal consistency between items. Values below .70 suggesting a lack of internal consistency and are considered unsatisfactory and values above .90 suggesting redundancies between items and are also considered unsatisfactory (Bland & Altman, 1997).

For the overall TSJFA, Cronbach's alpha was within the suggested satisfactory range, $\alpha = .73$. Two items were identified as improving the overall internal consistence if deleted, both within the physical environment domain. Removing the attribute relating to the presence of inclusive decorations would result in an improved internal consistency, $\alpha = .78$. Removing the attribute regarding the presentation of student work within the classroom would also resulted in an improved internal consistency, $\alpha = .78$.

Table 8.
Cronbach's Alpha by Domain and Overall TSJFA

	Alpha	Subscale alpha if item deleted	TSJFA alpha if item deleted	TSJFA mean if item deleted	TSJFA variance if item deleted
Physical environment	.47				
Decorations		.28	.78	1.8	1.2
Student work		.44	.76	2.1	1.1
Seating		.38	.73	3.5	1.5
Classroom Atmosphere	.86				
Peer engagement		.83	.67	2.7	1.3
Relationship		.83	.68	2.6	1.1
Student needs		.76	.67	2.7	1.2
Curriculum	.96				
Inclusive		.91	.73	1.7	1.4
Socially relevant		.84	.74	1.8	1.4
Pedagogy	.66				
Student-directed		.19	.66	3.2	1.2
Critical		.83	.72	1.9	1.3
Feedback		.57	.69	3.2	1.3
TSJFA Overall	.73				

The alpha for the physical environment domain suggested a lack of internal consistency, α = .47. Removing any one attribute from within the domain would not improve internal consistency to the suggested satisfactory level. The alpha for the classroom atmosphere domain did suggest satisfactory internal consistency, α = .78. Removing any one attribute from within the domain would decrease internal consistency, though not below the suggested satisfactory level. The alpha for the curriculum domain was above the suggested satisfactory level, α = .96, suggesting redundancy within the domain. Removing the attribute related to using curricular materials that connect to contemporary social issues would bring internal consistency to within the suggested satisfactory level, α = .84. The alpha for the pedagogy domain was below the suggested

satisfactory level, α = .66. Removing the attribute relating to modeling and providing students opportunities for critical engagement would bring internal consistency to within the suggested satisfactory level, α = .83.

Revisions to the TSJFA

Multiple indicators suggested several improvements to the TSJFA. First, the item reliability (as measured by Cronbach's alpha and the item reliability index) and the evaluation of item discrimination suggested that two items within the physical environment subdomain were not functioning appropriately: 1) the presence of inclusive decorations and 2) the presence of student work in the classroom. Further evaluation of the two subdomains constructed out of the learning environment domain (the physical environment and classroom atmosphere subdomains) suggested that, after removing the poorly functioning items, the remaining four items functioned better as attributes of the single learning environment domains. I present the Cronbach alpha and item function statistics by domain for the revised TSJFA with the attributes relating to inclusive decorations and student work removed and the remaining attributes associated with the physical classroom recombined with attributes associated with the classroom atmosphere reintegrated in to the learning environment domain in Table 9.

When recombined, the item reliability, evaluated by Cronbach's alpha and the IRI, suggested the four items were within accepted values for internal consistency; α = .82, IRI .67-1.01. Additionally, after removing the poor-functioning items and rescoring the TSJFA, all remaining items on the TSJFA were able to discriminate between individuals who scored high on the assessment and those who did not; $r_{s} = .41 - .78$, $p =$ <.01 - .02. In general, data from the pilot study suggested that a nine attribute assessment

using the original three domains discussed by O'Brien, Stewart, & Moje (1995) was more

internally consistent and functioned better than the original 11-item, four domain TSJFA.

Table 9.
Revised Cronbach's Alpha and Item Function Statistics by Domain and Overall TSJFA

	Alpha	Subscale alpha if item deleted	TSJFA alpha if item deleted	Discrimination	IRI
Learning environment	.82				
Seating		.86	.83	.43*	.67
Peer engagement		.71	.77	.76**	1.01
Relationship		.78	.78	.72**	.79
Student needs		.74	.80	.78**	.91
Curriculum	.96				
Inclusive		.91	.81	.41*	.51
Socially relevant		.84	.76	.46*	.58
Pedagogy	.66				
Student-directed		.19	.77	.84**	.97
Critical		.83	.81	.53*	.66
Feedback		.57	.80	.66**	.85
TSJFA Overall	.81				

Notes. $* p < .05, ** p < .01$

Postulate IV: Language Can Be Scientifically Studied Only under the Conditions of a Standard or Major Language

In order to attend to the second research question (Is it possible to consider the

philosophical limitations of the assessment development process in a way that allows

social justice to retain its liberatory potential?) I report the results of mapping the results

of the final phase of the assessment development process, pilot testing the TSJFA, onto

Deleuze and Guattari's (1980/1987) final postulate of linguistics, that language can be

scientifically studied only under the conditions of a standard or major language. Research

is always a political act, one of homogenization, centralization, and standardization; "the

scientific enterprise of extracting constants and constant relations is always coupled with

the political enterprise of imposing them on speakers and transmitting order-words" (Deleuze & Guattari, 1980/1987, p. 101). The objective of a royal science is not truth (even the presumed "small 't' truth" of post-positivism), but power (Holland, 2013); research is a political marker before it is a sign. In order for social justice to function within a royal science, that is, in order for social justice to function within a body of research, it must achieve those attributes of a major language, it must become fixed and it must be understood. Phase Three of the present study evaluated the degree to which this formative assessment designed to provide feedback regarding the use of research-supported and locally valued social justice teaching practices achieves these ends.

However, Phase Three's process of extracting the constants of teaching for social justice ends up excluding everyone from this ideal (Holland, 2013). This is not to say that, as a criterion assessment no educator can achieve a perfect score on the TSJFA, but rather that the process of evaluating the assessment, its reliability and internal validity, necessarily requires the majority, if not all, of observations to fail to meet this standard; a statistic requires variance. The *majoritarian* ideal of teaching for social justice, as produced through this scholarship, assumes this state of power and domination as well as its place as the presumed measure, rather than being defined by the measure. It is not demarcated by what is, but rather is a power marker of what should be.

The rigidity of the *majoritarian* ideal disallows an emergent expression of 'it-in-potential.' An individual cannot *become-majoritarian* as it is only the embodiment of fixity, a category of absolutes. Scores are not defined by the degree of correspondence to the idea, but rather in their move away from it. A royal science functions not in the degree to which individual observations embody the requisite attributes of the

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majoritarian ideal, but in their divergence from the totalizing expression. It is in this necessary movement from *majoritarian* to *becoming-minoritarian* that allows for individual expression and the actualization of possibilities. It is only in this *becoming-minoritarian* that being (as a verb) can be.

The relation of this "becoming-minoritarian of everybody, as opposed to the majoritarian Fact of Nobody" (Deleuze & Guattari, 1980/1987, p. 106) is observable in the quantitative results of Phase Three and the statistical need for variance. Statistical inference only generates meaning through the comparison of the individual to others and to this idealized standard; the abstracted amalgamation of individual observations becomes the metric against which the singular can be understood. An individual observation is defined by its relation to this idealized caricature, stratified along a continuum against which the specific can only be intelligible as below this predetermined value.

Within the context of a royal science, the majoritarian ideal always produces the individual observation. The degree of correspondence is not a latent attribute of the individual observation waiting to be extracted, but is a function of the instrument of capture. Reliability and validity are an attribute of the event of assessment, not the observation. In order for the assessment to function appropriately, the majority of observations are never expected to achieve this standard; in fact, if too many do so it disrupts the statistical functions through which the assessment can be evaluated. Individual assessments can only be understood in terms of an observation's deviation from the ideal. Simultaneously, if too many individuals fail to score well enough on a particular attribute within the assessment, there also exists too little variance for the item

to function appropriately and are defined by that lack of adherence to the ideal; damned by the law of excluded middle (a, or not a). The assessment can only function as individual observations move away from the idealized criteria, or their *becoming-aberrant*. It is not the ideal that defines the individual, but the individuals movement from that value that defines his or her ontological *becoming*.

This mode of quantified becoming is at the expense of other non-quantifiable modes of being. As Guattari (1995) noted:

> The symmetry of scale, the transversality, the pathic non-discursive character of their expansion: all these dimensions remove us from the logic of the excluded middle and reinforce us in our dismissal of the ontological binarism we criticised previously. A machinic assemblage, through its diverse components, extracts its consistency by crossing ontological thresholds, non-linear thresholds of irreversibility, ontological and phylogenetic thresholds, creative thresholds ofx heterogenesis and autopoiesis. (p. 50)

The measurement of the individual is predicated on several ontological presuppositions: the presumed stability of both the individual and the instrument, the sameness of discreet quantifications. Difference is assumed to be different from the same, not different from difference. The ascription of a number to the individual observation in relation to an idealized standard, other individual observations, and the mean is dependent on a transcendent assumption of commonality, a requisite external point of reference. It is within the limitation of this logical mode of reasoning that problematic values offer a different point of entry, disrupting the taken-for-granted assumptions of probabilistic quantification.

Summary

In this chapter, I provided the results of both the traditional assessment development process (APA, AERA, & NCME, 1999) and the philosophical analysis of the function of the assessment using Deleuze and Guattari's (1987/2980) concept of a "Perceptual Semiotics." These two orientations towards the development and evaluation of the TSJFA highlight the two sides of the assemblage and its twin tendencies towards stasis and change. On the one hand, in order for social justice to function, it must become calcified in some way. On the other hand, focusing on this constant prevents the realization of social justice in terms of radical change and human emancipation. Within traditional methodologies (and as presented in Chapter I), this seems to present a paradox. However, by understanding these two functions as not antithetical but instead as the two sides of the assemblage – that there is both this movement towards stasis and change within the present project –we can look past the philosophical limitations of the methods employed and reorient the project around the "problem" of social justice rather than the "question." In the following chapter, I discuss these results in relation to the established literature on teaching for social justice, answer the research questions presented in Chapter I, discuss implications for research and practitioners, and address the limitations of the present study.

CHAPTER V

DISCUSSION

This study developed and evaluated the reliability and internal validity of a formative assessment designed to provided in-service and pre-service educators feedback regarding the use of research supported and locally valued social justice teaching practices. Specifically, key attributes and indicators of teaching for social justice in the extant literature in teaching and teacher education are identified. Those research supported practices are then quadranglated (Smith, 2008) with locally valued attributes and indicators identified in course syllabi, faculty interviews, and pre-service teacher focus groups using the nominal group technique in an equity-focused teacher preparation program in the Pacific Northwest. Across all data sources, eleven key attributes of teaching for social justice have been identified. These attributes were then reviewed by a panel of experts who evaluated the relevance and importance of each attribute to teaching for social justice, in addition to evaluating the degree to which each attribute aligned with the teaching domains identified by O'Brien, Stewart, & Moje (1995). Using feedback from the review process, the Teaching for Social Justice Formative Assessment (TSJFA) was developed. The TSJFA was pilot tested on a selection of pre-recorded videos in order to evaluate the inter-rater reliability of the assessment, item function, and item reliability and internal reliability. The TSJFA demonstrated excellent inter-rater reliability and many of the attributes evaluated on the assessment functioned well.

Given the absence of any peer-reviewed formative assessment designed to provide feedback to pre-service and in-service educators regarding the use of research supported and locally valued social justice teaching practices, the TSJFA addresses a

critical gap in the literature. However, there are several limitations and other issues present within the context of the assessment development process that must be addressed before future researchers and practitioners can consider using the TSJFA. Additionally, as outlined in Chapter I, the TSJFA fills an important need within the field of teaching and teacher education but does so at the expense of realizing other possible conceptions and enactments of social justice – the philosophical limitations of the present project. Those philosophical limitations were examined using Deleuze and Guattari's (1980/1987) concept of a "perceptual semiotics" (Adkins, 2015, p. 1). Mapping the development of the TSJFA onto Deleuze and Guattari's concepts of a royal and minor science allows for a re-orientation of the project from the question of social justice (i.e. what is social justice?) to the problem of social justice (i.e. justice for whom and under what circumstances?). This re-conception of this project's philosophical limitations allows researchers and practitioners to attend to the seemingly paradoxical need for tools to support pre-service and in-service teachers' engagement with social justice teaching practices and the limitations of the project's ability to achieve those equitable ends.

This chapter begins by addressing the limitations present in the assessment development process to put the remainder of the discussion in the context of these weaknesses. The major findings of each phase of the assessment development process are then examined in relation to the relevant research questions posed in Chapter I, followed by a discussion of the relation between these findings and philosophical considerations. Finally, the implications of the tandem findings of this royal and minor science of teaching for social justice for both educational researchers and teacher education practitioners are presented.

Limitations

There are several limitations in the assessment development project that point to directions for future research. These limitations include the use of participants from a single teacher preparation program within one university in the Pacific Northwest, the low response rate during the first phase of the assessment development process, the limited observed variance in the selected videos on specific attributes on the TSJFA, and the need to establish the validity of the assessment.

During the initial phase of developing the TSJFA, research participants were selected from one teacher preparation program at a single university in the Pacific Northwest. This program was selected due to its clear and explicit commitment to social justice orientation and, as Dover (2009) notes, the need for conceptions of social justice to be embedded within local communities. However, by limiting participants to only those within that program, the present study does not attend to potentially divergent conceptions of justice that may be present within the broader community (both within the university and outside of it). Additionally, due to the explicit aim to develop an instrument grounded in locally valued conceptions of justice, the resultant instrument may not be generalizable to educators in different contexts. Additional, research is needed that examines the connection between the attributes of teaching for social justice identified in the present project and those valued both within and outside the broader community.

Second, during the first phase of the assessment development process, relatively few faculty and graduate students participated in the either the interviews or focus groups. Only three of the ten faculty participate in interviews and only 13 of the 83

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graduate students opted to participate in a focus group. This limited participation might bias the result of the first phase of the assessment development process, as participants willing to engage in either an interview or focus group with the explicit aim of identifying social justice teaching practices would likely be subject to selection bias (e.g. Heckman, 1979). Individuals who did not agree to participate may have done so for a verity of reasons, for example, either reject social justice as a core value in teaching and teacher education, or felt that social justice cannot be categorized as a list of discrete practices (as one participant in the item review process articulated). As a result, the fact that the results of the first phase of the assessment development process so closely mirrors the extant literature, theory, and assessments on social justice teaching practices might be due to who decided to participate. This concern is somewhat assuaged as the findings from the qualitative coding of the interviews and the results generated using the nominal group technique are similar to the findings of document analysis of course syllabi. However, the qualitative methodology employed in the document analysis, coding of faculty interviews, and pre-service teacher focus groups is predicated on the assumption that I can *bracket* out my own experiences and prior knowledge (Tufford, & Newman, 2012, p. 80); a fundamentally flawed assumption (LeVasseur, 2003). As a result, the underlying findings are necessarily mediated by my own ideas and conception of teaching for social justice.

Third, during the pilot-testing of the TSJFA, there was little observed variance for several attributes. Specifically, one of the attributes within the physical environment domain (inclusive decorations work), both attributes in the curriculum domain (inclusive and socially relevant curriculum), and one of the attributes in the pedagogical domain

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(critical pedagogical practices) had a median score of one, a mean score of less than two, and standard deviations between 1.24 to 1.26. Given the limited observed variance in these attributes, it is not possible to identify whether the lack of item discrimination and low item reliability index scores are a function of poorly-written items, items unrelated to other attributes of teaching for social justice, or if there was simply too little variance in the video samples. Additional research is needed to evaluate these attributes in the context of a more diverse sample in order to better evaluate the item discrimination and item reliability.

Third, the present study's final phase evaluated the inter-rater reliability, the item function, and the item reliability and validity of the TSJFA. Although the item review survey utilized in Phase Two of the present study sought to establish the content validity (Lawshe, 1975) of the TSJFA, there exists a need to further address the validity of the assessment (AERA, APA, & NCME, 1999, Croker & Algina, 2008). For the TSJFA to provide meaningful feedback to pre-service and in-service teachers convergent validity needs to be established (Campbell & Fiske, 1959) with established social justice ideation measures (e.g. Larke, 1990; Webb-Johnson & Carter, 2005; Ludlow, Enterline, & Cochren-Smith, 2008). Theoretically, educators who are more attentive to equity issues and cultural diversity should be more likely for those beliefs to influence their teaching practices (Enterline, Cochran-Smith, Ludlow, & Mitescu, 2008); therefore, it should be expected that individuals who score high on those assessments would also score high on the TSJFA. Additionally, for the TSJFA to provide meaningful feedback, it should also function quantitatively different than current assessments of teacher quality (e.g. SCALE, 2013) that evaluate unrelated domains. Establishing the TSJFA's discriminant validity

(Campbell & Fiske, 1959) would ensure that the feedback this assessment provides educators is unique to the domain of social justice teaching.

Despite these limitations, the present project represents an important first step towards developing and validating a formative assessment that can provide in-service and pre-service teachers feedback regarding the use of research supported and locally valued social justice teaching practices. Given that the expert panel of reviewers generally identified the attributes on the assessment as relevant to teaching for social justice, the strong item function for the majority of the attributes, and the strong inter-rater reliability of the assessment, the present iteration of the TSJFA offers a strong starting point for helping teacher preparation meet education's liberatory potential.

RQ1a: Are there key attributes of teaching for social justice common among data sources? What are some key indicators of those attributes?

There were several key attributes of teaching for social justice that were common among the course syllabi, faculty interviews, and pre-service teacher nominal group technique focus groups across the three teaching domains outlined by O'Brien, Stewart, & Moje (1995) – learning environment, curriculum, and pedagogy. Perhaps most noteworthy was the degree to which the faculty interviewed (and to a lesser degree, the pre-service teachers who participated in the nominal group technique focus groups) differentiated between attributes of the classroom atmosphere and the physical classroom environment within the broader domain of learning environment. To respond to this emphasis, the learning environment domain was subdivided into two distinct domains, the physical environment and classroom atmosphere.

Of the eleven attributes referenced by more than one source, five attributes were in the learning environment domain (one in the physical environment and four in the classroom atmosphere), two in curriculum domain, and four in the pedagogy domain. Several additional attributes were prevalent in only one of these data sources, but were prominent enough to warrant additional consideration, including three social justice teaching attributes in the learning environment domain (two in the physical environment and one in the classroom atmosphere).

This section highlights how the teaching practices identified in those three data sources (course syllabi, faculty interviews, and pre-service teacher nominal group technique focus groups) connect to the established literature on teaching for social justice highlighted in Chapter II and extant assessment instruments discussed in Chapter I.

Connection to Teaching and Teacher Education Literature

The fifteen attributes identified across these three data sources generally corresponded to the social justice teaching attributes identified in the review of the literature in teaching and teacher education presented in Chapter II. Within the physical learning environment, both Malins (2016) and Consalvo and David (2016) emphasize the importance of diverse representations and student work visible portrayed within the classroom environment, similar to the way faculty interview participants discussed the issue. Rubin, Abu El-Haj, Graham, & Clay (2016) and Baskerville (2009) emphasize student seating arrangements similar to comments in both the faculty interviewees and the pre-service teachers who participated in the nominal group technique.

Within the classroom atmosphere, numerous authors (e.g. Baskerville, 2009; van Tartwijk, den Brok, Veldman, & Wubbels, 2009; Regan, Chen, & Verniknoff, 2016;

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Pantic & Wubbles, 2012; Milner, 2008; Lynch & Fisher-Ari, 2017; Conner, 2010; Skerrett, 2008) and all data sources emphasize the importance of building and maintaining close, meaningful personal relationships with students. Similarly, several scholars (e.g. Sondel, Baggett, & Dunn, 2018; Pantic & Wubbles, 2012; Pantic, 2017) highlight the importance of being responsive to students' needs similar to the emphasis placed within course syllabi and both focus groups. Both focus groups and faculty interviewees emphasized the importance of modeling and providing students' opportunities to engage in positive peer-to-peer interactions similar to Brownlee, Scholes, and Walker (2016) and Schoorman and Bogotch (2010). Additionally, course syllabi and both focus groups highlighted the importance of educators modeling and providing students opportunities to engage in reflexive practices similar to several scholars (e.g. McDonough, 2009; Leonard, Brooks, Johnson, & Berry, 2010; Matias & Grosland, 2016). Perumal's (2015) discussion regarding the need of restorative justice practices echoes the role of such practices as a key attribute of teaching for social justice highlighted by Focus Group Two.

The importance of a curriculum that reflects the diversity present in the classroom and broader social context is identified by numerous scholars (e.g. Vavrus, 2009; Hachfeld, Hahn, Schroeder, Anders, & Kunter, 2015; Peters & Reid, 2009; Agarwal, Epstein, Oppenheim, Oyler, and Sonu, 2010; Wager & Foote, 2013; Bartholomaeus, Riggs, & Andrew, 2017; Coffey & Farinde-Wu, 2016; DePalma & Atkinson, 2010) in addition to all data sources within the present study. Similarly, there are numerous scholars (e.g. Agarwal, Epstein, Oppenheim, Oyler, and Sonu, 2010; Gale, Mills, & Cross, 2017; Peters & Reid, 2009; Robinson & Ferfolja, 2008) and all but one of the two

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focus groups who emphasize the importance of curriculum addressing contemporary social issues as a key attribute of teaching for social justice.

Within the pedagogy domain, the importance of modeling and providing students opportunities to engage in critical pedagogical practices is emphasized by numerous researchers (e.g. Jones & Hughes-Decatur, 2012; Dyches & Boyd, 2017; Jones & Hughes-Decatur, 2012; Clark, 2010; Nixon, 2010; Peters & Reid; Schoorman & Bogotch, 2010; Garii & Rule, 2009; Farnsworth, 2010; Teemant, Leland, & Berghoff, 2014) and all data sources within the present study. The use of student-directed learning practices was also prevalent in the majority of data sources within the present study and in the extant teaching and teacher education literature (e.g. Jordan, Schwartz, & McGhie-Richmond, 2009; Lee, Kim, Kim, & Lim, 2018; Miller, 2009; Leonard, Brooks, Johnson, & Berry, 2010; Louie, 2016; Spratt & Florian, 2015; Spratt & Florian, 2015; Teemant, Leland, & Berghoff, 2014). The importance of holding all students to a high academic standard and use of high-quality instructional practices is also a common theme among data sources in the present study and the extant literature (e.g. Milner, 2008; Kumar & Hamer, 2013; Rojas & Liou, 2017; Washburn-Moses, 2013).

Connection to Extant Assessments

In addition to connecting to the extant literature on teaching for social justice, the attributes identified in Phase One of the present project also corresponded with extant social justice teaching assessments discussed in Chapter I, specifically the Teaching for Social Justice Observational Scale (TSJOS) of the Reformed Teaching Observation Protocol-Plus (TSJOS, Mitescu, Pedulla, Jong, Cannady, & Cochran-Smith, 2011), the Teaching for Social Justice category of the Revise Inquiry Project Pre-service Teacher

Assessment at Boston College (RIPA-TSJ, Barnatt, 2008), and the Pre-Service

Performance Assessment-Plus (PPA+, Enterline, Loftus, D'Souza, Barnatt, and the BC

Clinical Faculty, 2009).

Similar to the findings of Phase One, many of the assessments identified in

Chapter I highlight the importance of various attributes of the learning environment. Two

assessments emphasize the need for educators to foster meaningful relationships with

students. The RIPA-TSJ (Barnatt, 2008) stresses the importance of creating a caring and

just classroom environment, and the PPA+ (Enterline et al., 2009) stresses the need for

educators to fosters a positive environment for learning in the form of social

relationships, care and cooperation among and between the teacher and students. All

three assessments emphasize the importance of educators addressing the needs of the

diverse students they serve; both RIPA-TSJ (Barnatt, 2008) and the TSJOS (Mitescu et

al., 2011) emphasize the need for educators to affirm diversity as an asset and the PPA+

goes further, noting the need for educators to build on this diversity in their instructional

strategies and activities. The TSJOS (Mitescu et al., 2011) also highlights the need for

educators to support positive peer-to-peer interactions through fostering a climate of

respect and scaffolding social relationships. Both the RIPA-TSJ (Barnatt, 2008) and the

PPA+ (Enterline et al., 2009) emphasize the importance of educators modeling reflexive

practices, especially in relation to how their experiences impact their views and

understanding of academic institutions and teaching practices. The TSJOS (Mitescu et al.,

2011) and RIPA-TSJ (Barnatt, 2008) also notes the importance of fair classroom

management; emphasizing the importance of fair, caring, and just classroom

environments.

Within the pedagogy domain, both the RIPA-TSJ (Barnatt, 2008) and the PPA+ (Enterline et al., 2009) address the importance of educators scaffolding and providing students opportunities to engage in critical practices, addressing inequity both within and outside of the educational system. Meanwhile, the TSJOS (Mitescu et al., 2011) highlights the use of student-directed inquiry practices and other high-quality instructional practices, in addition to holding all students to a high academic standard, as other important attributes of teaching for social justice.

Points of Disconnect and Discussion

There are a few disconnects between the extant literature on teaching for social justice and the practices identified in Phase One of the present study. First, as previously discussed, faculty in the present study placed a greater emphasis on the importance of attributes within the physical environment than were prevalent within the literature. Although there are scholars who emphasize the importance of attending to attributes of the physical environment, this was the least cited attribute of teaching for social justice within the literature. Second, several scholars (e.g. Rubin, Abu El-Haj, Graham, & Clay, 2016; Young, 2010; Peters & Reid, 2009) stress the importance of educators allowing students to set the tenor of the classroom atmosphere, particularly in relation to issues of inequity. Although many data sources within Phase One highlighted both the importance of critical pedagogical practices to address social inequities and student-directed inquiry, these two ideas were not directly addressed in tandem; it would be possible for a teacher to both utilize student-directed inquiry and critical pedagogical practices and not provide students agency to address these issues as discussed in the literature.

Similarly, although there is a large degree of correspondence between the attributes identified in Phase One of the present study and the extant social justice teaching practice assessments discussed in Chapter I, there are also some important differences. Specifically, although most attributes within the classroom atmosphere subdomain and pedagogy domain identified in Phase One were duplicitous of attributes present on current assessments, none of the three assessments (the TSJOS, Mitescu, Pedulla, Jong, Cannady, & Cochran-Smith, 201; the RIPA-TSJ, Barnatt, 2008; and the PPA+, Enterline, Loftus, D'Souza, Barnatt, and the BC Clinical Faculty, 2009) addressed attributes related to either the physical classroom environment or the curriculum. This may be due to differences in theoretical frameworks employed in the present study and those used in the development process of the other assessment instruments; though, it is not possible to tell as the development process of those instruments is not presented in the extant literature. Overall, however, the attributes of teaching for social justice identified in Phase One of the present study align with both the extant literature and extant assessments of teaching for social justice.

RQ1b: Are those attributes relevant and necessary to teaching for social justice, and if so, do they align with the domains outlined by O'Brien, Stewart, & Moje (1995)?

In Phase Two of the present study, the item review judges indicated that all eleven attributes identified in Phase One were relevant to teaching for social justice; individual attributes ranged from .83 to .92, well above the suggested critical value (Polit & Beck, 2006) of .80. Items within the curriculum domain were, on average, identified as the most relevant, with both inclusive representations and social relevance in the curriculum both scoring above .90. This is somewhat divergent from the extant literature on social justice

teaching, as presented in Chapter II, in which there was more emphasis on pedagogical practices and classroom atmosphere. It also differs from extant assessment instruments outlined in Chapter I, none of which address aspects of the curriculum. This may reflect idiosyncratic differences in conceptions of social justice as enacted within this specific local context, or that scholars who focus on issues of justice in relation to the curriculum are publishing in different venues.

Although item review judges identified all eleven attributes as relevant to teaching for social justice, they only identified a few as important; only five of the eleven attributes met the more conservative critical value (Ayre & Scally, 2013) for importance, an additional two met the more liberal critical value (Wilson, Pan, & Schumsky, 2012), and four were below any recommended threshold for importance. Two items, both within the physical domain, received a negative score for importance; fewer than half of judges rated these items as important. Both of these attributes related to decorations in the physical environment; one evaluating the degree to which decorations included diverse representations and how student work is displayed in the classroom. These items also represented attributes highlighted by only one source in Phase One (faculty interviews), and were not as prevalent in either the extant literature presented in Chapter II or the social justice teaching assessments presented in Chapter I. Despite this, these attributes were revised and retained to reflect additional qualitative feedback provided in the item review survey because they were neither time-consuming nor difficult to score. For the two additional attributes that received positive scores for importance below the critical threshold (fostering positive peer-to-peer engagement and student-directed inquiry), substantial revisions were made to reflect additional qualitative feedback provided by the

judges. Minor adjustments were made to the remaining items to provide additional clarity.

In general, judges had difficulty aligning attributes with the specific teaching domains defined by O'Brien, Stewart, & Moje (1995). After subdividing the learning environment into the physical environment and classroom environment subdomains, only a single attribute (student-directed pedagogy) achieved the recommended critical value of .80 (Rubio, Berg-Weger, Tebb, Lee, & Rauch, 2004). Modeling and providing students opportunities to engage in critical practices nearly achieved this value, scoring .73. After scoring attributes that were identified as either related to the physical environment or classroom atmosphere as correctly identified with the learning environment domain, only moderate improvement was observed; both the presences of inclusive decorations and student work were identified within the broader context of the classroom environment, and student seating came close to reaching the critical threshold.

The inability of judges in Phase Two to align the attributes identified in Phase One and with the specific teaching domains may be due to several factors. First, although definitions of each domain were presented in the survey instruments, participants were required to select a hyperlink to see these definitions. It is unclear if and how many participants did so. Part of the misidentification may be due to difference between the definition of each domain in relation to the specific attributes in the survey and colloquial or personal definitions used by judges who did not see or understand that definition. Additionally, as O'Brien, Stewart, & Moje (1995) note, there is a great deal of correspondence between each domain; aspects of the learning environment affect and are affected by aspects of both pedagogy and curriculum. Some of the observed disconnect

may be due to these interdependent relations and the fact that these domains are far from orthogonal.

RQ1c: Can the TSJFA be scored reliably and do how do the items function?

In Phase Three of the present study, a team of five researchers and I pilot-tested the TSJFA on a sample of pre-selected videos in order to evaluate the inter-rater reliability and item function statistics for the assessment. Then, in combination with the findings of Phase Two of the present study and the relation between the findings of Phase One, the literature on teaching for social justice presented in Chapter II, and extant assessment instruments for evaluating social justice teaching practices, revisions were made to the TSJFA to improve the assessment.

Interrater reliability

Overall, the inter-rater reliability was strong; even using the more conservative Krippendorff's alpha (Hayes & Krippendorff, 2007) approach, the individual items, subscales, and overall TSJFA scores were well within acceptable ranges. This result suggests that with moderate training, individuals should be able to reliably score observations using this assessment. The fact that there was an improvement from the observations scored during training and the pilot-test scoring, coupled with the fact that for the last observation session little if any discussion was needed for raters to score consistently, suggests that as individuals become more familiar with the TSJFA, they score more consistently.

Item Function

Given that the scoring of the TSJFA was within acceptable bounds for test reliability, item function was then examined. In examining how the items and subscales

of the TSJFA functioned, the internal consistence of the assessment was evaluated using

Cronbach's alpha. Overall, the TSJFA demonstrated acceptable internal consistency

(Bland & Altman, 1997); however, two of the four subscales did not achieve this

standard. Both the Physical Environment subdomain (.47) and pedagogy domain (.66)

were below the recommended .70 threshold for acceptability. This result suggests that not

all items within those domains evaluated the same construct and that revisions may be

necessary for the assessment to meet the standard for internal consistency. Examining

improvements to both the subscales and overall TSJFA reveal that removing any one

item would not substantially improve the Physical Environment subdomain, but

removing the items corresponding to the attributes related to inclusive decorations in the

classroom or the display of student work would improve the overall internal consistency

of the TSJFA, suggesting these items do not correspond with the other attributes

evaluated on the TSJFA. Removing the item related to modeling and providing students

opportunities to engage in critical practices would improve the internal consistency of the

pedagogy domain, but hurt the overall internal consistency of the TSJFA. This result

suggests that it may be worth adjusting some or all of the items within the pedagogy

domain, but removing any one item may not be appropriate.

After evaluating the internal consistency of the subscales and overall TSJFA,

descriptive statistics and item discrimination function were examined for each item on the

TSJFA. As previously discussed in the limitations section of this chapter, for several

items there was not sufficient observed variance to fully evaluate the item function for

each attribute; the median value for the presence of inclusive decorations, both items

related to the curriculum domain (curriculum includes inclusive representations and is

socially relevant), and teachers model and provide students opportunities to engage in critical practices had a median score of 1.0, the lowest possible score on the assessment. As stated in the limitations section, additional observations with greater variance are needed to better evaluate the item function of these attributes.

In examining the discrimination function, or the degree to which individuals who score high or low on one attribute score high or low on the overall TSJFA, several items stand out. The relation between many of the items and overall performance on the TSJFA was statistically significant for many attributes, including all attributes within the classroom atmosphere subdomain and pedagogy domain. Additionally, student seating arrangement within the physical environment subdomain and the degree to which curriculum was socially relevant within the curriculum domain were also statistically significantly related to overall test performance. However, neither item related to the presence of inclusive decorations or student work in the classroom, nor the presence of inclusive representations in the curriculum differentiated between observations that were scored high or low on the TSJFA. This result may be due to the lack of variance observed on these items; however, it may also be that these items do not correspond to how social justice is operationalized in the remainder of the assessment.

Revisions to the TSJFA

There were several findings within Phase Three of the present project that suggest revisions to the TSJFA that will improve the overall assessment, particularly in conjunction with the findings of Phase Two and the disconnects observed between the results of Phase One, the literature on teaching for social justice outlined in Chapter II, and extant assessments evaluating teaching for social justice discussed in Chapter I.

Specifically, the low internal consistency and lack of discrimination for the items related to the presence of inclusive representations and student work in the classroom was consistent with the findings of the item review surveys conducted in Phase Two; neither the item review judges nor the observed scores support the inclusion of these two attributes as key indicators of teaching for social justice. Additionally, these attributes were among the least-cited in the literature on teaching for social justice presented in Chapter II and absent from all other assessments presented in Chapter I. Although these items were retained because they were quick and easy for raters to score, they do not seem to be a key attribute of teaching for social justice. In fact, despite the degree to which faculty participants emphasized the importance of attributes of the physical classroom, there is little evidence from other sources to support dividing the learning environment into two domains, one related to the physical environment and one related to the classroom atmosphere.

To evaluate this observation, I analyzed the internal consistency and item function of attributes and domains of the TSJFA if the items related to the presence of inclusive representations and student work in the classroom were removed and the remaining item related to the physical environment (student seating) was re-combined with the attributes within the classroom atmosphere into the learning environment domain. Overall, this adjustment led to a significant improvement on the assessment. The internal consistency of the newly recombined learning environment subscale was excellent, suggesting the attribute related to student seating better related to other aspects of the learning environment than it previously had to the other attributes of the physical environment when it was part of that subscale. The overall internal consistency of the TSJFA also

showed substantial improvement, suggesting that the remaining nine attributes better corresponded to a single concept of teaching for social justice. Additionally, when the item discrimination function was evaluated with the revised TSJFA scores removing the influence of the two attributes of the physical environment associated with the presence of inclusive representations and student work in the classroom, all remaining nine attributes statistically significantly related to overall test performance; that is, all items now discriminated between individuals who scored high on the TSJFA and those who did not. Although there is an opportunity for additional research examining the importance of inclusive representations and student work in the classroom, this finding suggests that those attributes do not correspond to the broader conception of social justice as assessed by the TSJFA.

RQ2: How Does Deleuze and Guattari's Concept of a "Perceptual Semiotics" Conceptualize a Minor Science of Teaching for Social Justice in Contrast to the Royal Science

In addition to developing and evaluating of the TSJFA, the project is also mapped onto Deleuze and Guattari's (1980/1987) concept of a "Perceptual Semiotics" (Adkins, 2015, p. 1), using the argumentation presented in the chapter "Postulates of Linguists" from *A Thousand Plateaus: Capitalism and Schizophrenia* (Deleuze & Guattari, 1980/1987, p. 75-110). The aim of this philosophic analysis, as discussed in both Chapter I and Chapter III, was not to directly undermine the TSJFA as a potential tool for addressing the need for a formative assessment that can provide in-service and pre-service educators feedback regarding the use of research supported and locally valued social justice teaching practices. Instead, this analysis served to put social justice "back

on the map" (ibid. p., 13). That is, the aim of this philosophical analysis was to allow reflection on both the question of social justice (i.e. what is social justice?) that ground the assessment development and the problem of social justice (i.e. justice for whom and under what conditions?).

This section examines how the philosophic analyses interspersed between the presentations of the results of the three phases of the assessment development project serve the aim of putting social justice back on the map. Each section is introduced with what Atkins (2015) offers as Deleuze and Guattari's "Four postulates of pragmatics" (p. 81).

Research is Neither Informative nor Communicative

In mapping Deleuze and Guattari's (1980/1987) critique of the postulate that language is informative and communicative, it becomes clear that research functions not through the communication of ideas, but through order-words, commands that are to be believed and obeyed. Research does not inform, but instead commands; the transmission of information is redundant to the order-word. This "doing" of research functions only at this confluence of a particular set *mechanic assemblage of bodies* and *collective assemblage of enunciation*, one that could be otherwise.

This analysis emphasizes that research, in orientation towards the function of a *royal science*, is not generative, but limiting. The production of a subject of research (social justice in the case of the present project) does not create new possibilities, but instead forecloses the possibilities of divergent conceptions of justice – the philosophical limitations of the present project as discussed in Chapter I. This is the order-word, as Deleuze and Guattari (1980/1987) note, as a "death sentence" (p. 88); it is the reduction

of infinite possibilities (the "virtual," ibid., p. 94) to a singular actuality. In order for a research as a royal science to function – that is, for social justice as the subject of the present project to be meaningful – it is necessary for knowledge to be fixed and sharply bound. There is no room for ambiguity within a royal science; this conception social justice is not communicated by commanded. As Deleuze and Guattari note,

> The compulsory education machine does not communicate information; it imposes upon the child semiotic coordinates possessing all of the dual foundations of grammar (masculine-feminine, singular-plural, noun-verb, subject of the statement-subject of enunciation, etc.). The elementary unit of language – the statement – is the order-word. (ibid., p. 75-76)

Research, within the context of a royal science, similarly functions by fixing those coordinates of possibilities. Social justice is an order-word.

The aim of this analysis, however, is not to rearticulate the perceived philosophical limitations of the present project as discussed in Chapter I. In point of fact, these philosophical limitations are an artifact of the royal science; it is only in fixing social justice as an order-word that these divergent possibilities become impossible. As a result, we see the paradox of teaching for social justice; for it to function (not only as the subject of a royal science, but also as a sign), it must become a fixed ideal; however, this fixed ideal functions in exclusion of these divergent possibilities (the virtuality of social justice). What a minor science allows us to do is consider a social justice that is in excess of our assessment of it.

The Abstract Machine of Research Appeals to Extrinsic Factors

In *mapping* Deleuze and Guattari's (1980/1987) critique of the postulate that there is an abstract-machine of language that does not appeal to any extrinsic factor, the assumption that, even within a particular mode of inquiry, there exists the requisite ontological stability of the subject (in this case, the universal concept of social justice) that is internally consistent outside the pragmatic enactments of this ideal (the extrinsic factors) is disrupted. As Deleuze and Guattari note, "the abstract machine as it relates to the diagram of the assemblage is never purely a matter of language, *except for lack of sufficient abstraction*. It is language that depends on the abstract machine, not the reverse" (ibid., p. 91, emphases added).

To demonstrate this point the form and substances of content and expression through which research, as an assemblage, makes possible is mapped. In mapping these attributes of the abstract machine it becomes clear that there is not a pure conception of social justice that can be studied, but rather that social justice is always enacted in the context of those external factors; the conception of social justice offered by a royal science is not too abstract, but not abstract enough (Mazzei, Graham, & Smithers, 2018). That is, in defining social justice as a set of discrete practices, the royal science of social justice fails to account for the conditions of possibility that allow and necessitate a conception of social justice and its conditional enactments (it is insufficiently abstract). The purpose of mapping the assemblage of social justice is not to better capture the concept or sign of social justice by situating it into the context of the mechanic assemblage of bodies and collective assemblages of enunciation that make it possible, but

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to highlight how it is not possible for there to be a "pure" conception of justice, only one that is contingently deployed.

Mapping how the idea of social justice function does not provide a clearer picture but instead offers a complex portrait of social justice as enacted, one that connects this abstracted ideal to those extrinsic factors that function as the conditions of possibility through which social justice, as the subject of a royal science, can be enacted. This mapping leads to an understanding that social justice can function only in relation to systems of oppression that function both as form of content and expression; racism effectuates both an incorporeal transformation and material effects on the body. In order for there to be the requisite conditions for a royal science of social justice, oppression must be the form of content and expression and not just its substance. Social justice requires inequity to be more than the attributes of the body or syntactical markers, but also the structures (both physical and syntactical) that organize the body in unjust hierarchies. Bruises on bodies and racial slurs, for example, are more than just a physical wound or hurtful words, but also function as an organizational schema. In order for there to be a royal science of social justice, injustice must be in excess of the individual acts of violence and intolerance enacted. Social justice necessitates a virtuality of injustice, one that is in excess of the individual acts. It in acknowledging how the form of the machinic assemblage of bodies and collective assemblage of enunciation have structured the bruise and slur as a power marker that social justice, as a sign, becomes intelligible.

This understanding of a systemic injustice, while not new (e.g. Baez, 2000), runs counter to policies that have sought to redress inequity by addressing these individual enactments. This is not to suggest that police who enact violence on communities of color

(e.g. Watts, 2018), employees who hire and compensate women at unfair rates (e.g. Blau & Kahn, 2007), or governmental policies that perpetuate violence against individuals who express non-binary gender identities (e.g. Patel, 2017) should go unaddressed; however, addressing these individual enactments of injustice fails to disrupt the conditions that make such enactments possible. If injustice is the form of content and expression – that is, it functions not through the individual acts of violence but rather as the structures that make these acts, as instances of injustice, possible – then redressing injustice cannot be calcified as a discrete set of practices, as this finite response cannot respond to the virtuality of injustice. If inequity is more than the sum of the individual acts of injustice, if a racial slur is a "power marker before it is a syntactical marker" (Deleuze and Guattari, 1980/1987, p. 101), then the point of inflection cannot be at the level of individual acts, but requires a different point of intervention (e.g. Marx & Engels, 1848/2002, Derrida, 1994/1993, Butler, 1990).

Unfortunately, research methodology, in function as the form of expression, governs the structure that social justice can assume within the present project in such a way that it cannot respond to this virtuality of injustice. The methodology of a royal science binds the subject, providing it structure at the cost of possibilities by fixating on extracting the universal rather than the pragmatics that make injustice possible. Thus, although a royal science of social justice allows for responses to the actuality of injustice, it is unable to attend to the virtuality of inequity. A royal science of social justice cannot be radical, but must be (by definition) fixed, grounded in the actual.

But the radical is still possible within the present project through assuming orientation to the minor science. Understanding the interplay of these variables allows us

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to move past nominalism and post-structuralism (the bruises on the body are real and more than just a syntactical marker) while avoiding Leplacian (1795/1902) determinism; it could be otherwise. This particular instantiation of social justice emerges from this particular constellation of variables, but other possibilities, more radical and liberatory, still exist, if virtually. The danger intrinsic to the "royal," is in the dogmatic fixation of the ideal; "it is not the slumber of reason that engenders monsters, but vigilant and insomniac rationality (Deleuze & Guattari, 1972/1977, p. 112).

Language has only Variables and Forms a Heterogeneous System

In mapping Deleuze and Guattari's (1980/1987) critique of the postulate that there are constants or universals of language that enable as the definition of a homogenous system, this research highlights how the royal science fixates on the question of social justice (what is social justice?) rather than the problem social justice (justice for whom and under what conditions?) in such a way as to limit what we might learn from the present project. This tension between the mundane and the radical (an enactment of social justice within the limits of a royal science and the prophetic possibilities of a pragmatic justice) can be observed in a fixation of validity, or quantification of the degree to which the assessment captures a pure concept of social justice. It is at this intersection that we can clearly see the tension between the question of social justice (what is social justice?) and the problem (justice for whom and under what conditions?). This is not to suggest that evaluations of validity are unconcerned with the problem; in fact, validity is exactly about the conditions under which the assessment could be consider valid; "Validity refers to the evidence presented to support or refute the meaning or interpretation assigned to assessment results" (Downing, 2003, p. 831). However, the deployment of the problem

within the royal science is superseded by the constant; that is, there is a presumed context that is ontologically stable outside of the contingent deployment of the assessment and in which the assessment will, ideally function the same – the homogenous system. Thus, while social justice within the royal science is conditional on the context, this dependency on the homogenous system leads back to the question, not the problem.

The difference in function of the problem within a royal and minor science is foundational, not syntactical. Within a royal science, the assessment can only function appropriately (it is only valid) in the degree to which it appeals to the transcendent ideal within the homogenous system. Conversely, the problem within a minor science does not presuppose this ontological stability, but instead attends to the function of the assessment in its contingent deployment. While a royal science looks for slippage from the ideal, the aim of a minor science is in retaining the prophetic possibility of liberatory education: it is in search of research's capacity for realizing of the virtualities of social justice.

Perhaps the most mundane finding is that the majority of the attributes evaluated by the TSJFA are consistent with the literature on teaching for social justice presented in Chapter II and extant assessments discussed in Chapter I. There is little in the TSJFA that is particularly novel, and certainly nothing revolutionary. This is not to suggest that the assessment does not address an important absence in the field; within the current political milieu there is undoubtedly a need for teachers to better meet the needs of the diverse students they serve (e.g. Justice & Stanley, 2016). Although the TSJFA addresses this need, in doing so it calcifies a particular conception of social justice at the expense of other possibilities.

It is by fixating on the heterogeneous instead of seeking out the homogenous, by keeping at the forefront the problem of social justice instead of the question, and by emphasizing the moral over the ethical that a minor science can function as an instrument of change. In turning away from the practical problems of ethics and a royal science of validity, we can instead consider what possibilities of justice exist within teaching and teacher education. The minor science of social justice allows us to understand justice in excess of the predetermined outcomes premediated by present assessment instruments. It requires us to reformulate the issue as one not focused upon imperatives ("a teacher should…") but of modal possibilities; "what could a teacher do?" As affective power is realized through engagement, the problem of social justice within a minor science requires that we engage with teachers and teacher candidates in order to realizing their affective capacities. A minor inquiry of social justice calls for a consciousness of the heterogeneity, the constant variation of content and expression. It is in this ethical problem that a minor science allows for the generation of the new possibilities.

In focusing on the problem of social justice instead of the question of the assessment within the purview of a "royal science," a minor science requires both a critical practice and a call to action. Unlike the academic ethics that so often play-out merely as classroom exercises (Bryant, 2011), a minor science does not allow for only a retrospective analysis of the relative value of what has been, but also calls for the generation of something different. Rather than the excesses of Marxian-fueled vanguardism (e.g. Zadnikar ,2009), Deleuze posits a theory of change that rejects transcendent value and, instead, is predicate on affective potentiality. It is in focusing on

the problem of social justice (justice for whom and under what conditions?) that we can understand the affective potential, the power, of the TSJFA.

Social Justice does not Require Fixation on a Royal Science to be Studied

In mapping Deleuze and Guattari's (1980/1987) critique of the postulate that language can be scientifically studied only under the conditions of a major language I focus on how a royal science of social justice produces subjects defined by their deviation from this ideal. The royal science is always about deviancy and functions through an emphasis on shortcomings rather than potential. In order for an assessment to function appropriately, there must be variance in score; this is an attribute of the assessment, not of social justice. This need for variance, specifically the need for a particular distribution of variance, presupposes the individual observations. While the individual observations may be unique, their function within the evaluation of the assessment is not. This is all a specific assessment instrument can ever do; differentiate. The expressed aim of the present project, as articulated in Chapter I, was to develop an assessment instrument that can provide structured feedback as a tool to address variation in educators' motivation to engage in social justice teaching practices. To state that aim another way, the present project's aim was always to hold educators to an ideal and find them wanting. Even stated within the most positive of growth mindsets (e.g. Dweck, 2006), this objective stands. The purpose was to provide feedback so teachers could continue to strive for an ideal, an ideal that defines them by their movement away, the degree to which they fail to meet that standard. Even the rare teacher who meets the ideal does not embody it, but is defined by it. In striving for the conception of social justice calcified within the TSJFA, teaching for social justice can only realize that narrow, finite possibility. However, within

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the minor science, the emphasis is not on the degree to which educators achieve this standard, but in the possibilities that are opened up as they move away from the ideal. It is only in how educators are different from this defined standard that there is space for a prophetic, liberatory possibility of teaching for social justice that is in excess of what is currently possible.

Calcifying social justice within this royal science does not mean that there is no longer this prophetic possibility. Social justice may be limited in how it functions within the assessment, but this does not arrest the variability of the assemblage – the form and substance of content and expression were always in excess of the present project. Social justice, within the present project, may function as an order-word (a death sentence), but it also creates new points of departure, new opportunities for lines of flight, new ways of thinking and enacting social justice within the classroom. This may be in excess of the assessment as apparatus of capture, but still part of its function. The assessment is an interruption that provides an opportunity for the next.

There are three key findings across this philosophical analysis. First, the minor science does not stand in opposition to a royal science, but rather is always already a part of research; "the task is not to categorize science as either royal or nomad [minor], but to recognize that all scientific practices will involve some combination of both royal and nomadic tendencies. The project of becoming, of creating the new, begins with seeing the nomadic in everything" (Adkins, 2015, p. 13). Second, although all research has both royal and minor tendencies, orienting towards the minor changes how traditional research methods and methodologies function. Whereas a royal science is fixated on ideals and validation (turning towards the territorial side of the assemblage), a minor science

focuses on the generative capacity of research or the "cutting edge of deterritorialization" (Deleuze & Guattari, 1980/1987, p. 57).

Finally, the development of the TSJFA contains major and minor tendencies. The value and power of a minor science is not in sabotaging this project, but to shake the certitude associated with traditional methods and methodologies. Instead of an either/or research approach, we aim to think with the "and" – "Thinking with AND, instead of thinking IS, instead of thinking for IS: empiricism has never had another secrete. Try it, it is a quite extraordinary thought, and yet it is life" (Deleuze & Parnet, 1987, p. 57). This project thinks with AND to hold on to both the old and the new empiricisms (St. Pierre, 2016), to attended to the political immediacy of the present milieu in desperate need of social justice while holding open the possibility of new modes of relations not yet knowable. This project holds assessment accountable as both necessary and insufficient, to take traditional methods and methodologies "under erasure" (Derrida 1967/1976).

Implications

The TSJFA can serve as a useful tool for both educational researchers and teacher educators. The following section addresses some implications of the present study for both research and practice. Each section highlights how both orienting towards the royal and minor science of the assessment present new opportunities in order to emphasize the potential of engaging with both the problem and the question of social justice.

Implications for Research

By quantifying the degree to which in-service and pre-service teachers implement research supported and locally valued social justice teaching practices, the TSJFA can assist researchers in conducting various future follow-up studies. The result of these

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future analyses can inform teacher educators and policy makers as they attempt to redress systemic inequities and aim to make our educational systems work for all. However, as I have mapped parallel to the development of the TSJFA, dogmatic orientation towards this royal science of teaching for social justice comes at the expense of other possibilities. Thus, such research must always return to the problem of social justice. In this section, I highlight some possible avenues of future research.

Future research on the TSJFA. The present project has focused on identifying key attributes of teaching for social justice grounded within the particular context of a university in the Pacific Northwest. Although the findings of this analysis are consistent with the literature on teaching for social justice presented in Chapter II and extant assessments discussed in Chapter I, it is unclear the degree to which this particular constellation of practices aligns with conception of social justice enacted elsewhere. Future research should look at how the concept of social justice is similar and different in various contexts in order to better understand if these and/or other attributes of teaching for social justice are generalizable to the broader field of teaching and teacher education.

In addition to needing future analysis that assesses how social justice functions within other local communities and that evaluate the degree to which those attributes identified in the present study are generalizable to a broader population. In addition, the TSJFA needs to be validated for us within actual classrooms. The present study analyzes the reliability and item function of the TSJFA using pre-selected videos. Although video analyses are common in education (Goldman, Pea, Barron, & Derry, 2014), using the assessment within classrooms provides additional opportunities to provide feedback to teachers, as it would not be limited by the orientation, length, and focus of a video.

Validating the TSJFA for use in the classroom is an important step in meeting the expressed aim of the assessment to provide feedback to educators.

Finally, although the attributes evaluated on the TSJFA were analyzed in the present study for their content validity in Phase Two, additional research is needed to evaluate other aspects of the validity of the assessment, such as convergent validity (Campbell & Fiske, 1959) with established social justice ideation measures (e.g. Larke, 1990; Webb-Johnson & Carter, 2005; Ludlow, Enterline, & Cochren-Smith, 2008) and discriminant validity (Campbell & Fiske, 1959) with other established assessments of teacher practices that explicitly do not address social justice (e.g. SCALE, 2013).

Future research with the TSJFA. The TSJFA provides an important tool for identifying the degree to which in-service and pre-service educators implement key attributes of teaching for social justice in their classroom. By providing such feedback, the TSJFA can serve as a tool for evaluating the effectiveness of various cultural sensitivity (e.g. Solomon, 1995) and social justice (Ukpokodu, 2007) teacher training and in-service programs. Using a pre-post study design (Brogan & Kutner, 1980), the TSJFA allows researchers to examine the degree to which such programs lead to changes in teaching practices. As outlined in Chapter I, in order for social justice to be meaningful in must influence what educators do in the classroom.

In addition to serving as a tool for evaluating the effectiveness of teacher training programs, the TSJFA also can serve as the foundation for identifying high-impact social justice teaching practices. Using quasi-experimental research design (Hyman, 1982), targeted interventions, and hierarchical and longitudinal analytic techniques (e.g. McArdle & Nesselroade, 2014), the TSJFA can help identify the effect of specific social

justice teaching practices on meaningful student-level outcomes. Doing so can help the field understand what impact these practices have on which students, in which context, and under what conditions. Doing so would allow us to catalog and prioritize teaching practices that can have the greatest impact on the diverse students we serve.

Philosophical considerations. Although the TSJFA provides avenues forward within the royal science, it also can serve as the starting point for additional philosophical research. As emphasized throughout the present study, calcifying social justice as a discreet set of teaching practices achieves a particular set of objectives, but the expensive of understanding and striving towards realizing other possibilities. Post-qualitative research methodologies such as employed in the present study, provide a tool for interrupting the certitude that often accompany a royal science. By returning to the problem of social justice, not just the question, these philosophical analysis demand that researchers attend to the philosophical limitations inherent to this project. A minor science leads to an uncertainty that both allows for an individual to act but also demands a sense of humility; the project is this, but it could be otherwise. This consideration of the virtuality of social justice is not just epistemic, but ontological.

In the present study, I have used this post-structural analysis as an interjection into the royal science of developing the TSJFA. As such, I have not sought to "do" philosophy in as much as use philosophy to help me think differently. Additional research is needed that focuses on this philosophical analysis as the primary objective, rather than using it as a tool in relation to the project.

Implications for Practitioners

In addition to avenues for future research, the TSJFA can serve as a useful tool within the field of teaching and teacher education. The expressed aim of the assessment is to provide in-service and pre-service teachers feedback on the use of research supported and locally valued social justice teaching practices. As such, it can be used within the field to help educators understand the degree to which they engage in such practices and identify opportunities for growth as they continue to strive to meet the needs of the diverse students they serve. Doing so can help teachers' motivation for engaging in such practices.

In addition to providing feedback to educators, the TSJFA can also provide teacher training programs information regarding teacher preparation to engage in social justice teaching practices. By identifying patterns of strengths and opportunities for growth across pre-service and/or in-service teachers, such programs can identify short-comings in teacher training and develop targeted interventions to address these concerns.

Although the TSJFA provides an important tool for providing feedback to pre-service and in-service teachers and teacher preparation programs, attending to the philosophical problem of social justice necessitates that these professionals continue to engage the idea of justice in excess of those attributes identified on the assessment. Educators should see the TSJFA as a point of departure, as starting point in attempting to redress systemic inequities that are in excess of what can be ameliorated simply through the practices on the present assessment.

Conclusion

A student walks into a clean and colorfully decorated classroom. As they examine the wall, they see themself reflected in the posters hanging on the wall and see their efforts and hard work celebrated on the bulletin boards. They sit amongst a diverse group of their peers and actively work with their friends to engage in personally meaningful and critical work addressing issues they face in their community. The teacher provides clear feedback to help the student continue to grow while demonstrating to the student an ethic of care. The student feels comfortable in the classroom and is supported in developing skills that will serve them well in the future. However, that future may not be one in which the student thrives. Although they have had opportunities to engage in critical practices, the result of this work has only been incremental change, a "tinkering towards utopia" (Tyack & Cuban, 1995). In fact, in redressing these issues rather leveraging them as a rallying point for more systemic change, this critical work as undermined their potential to serve as a catalyst for more meaningful, revolutionary change. Social justice is not something that has been realized in totality, but a possibility differed.

The TSJFA is an assessment that provides pre-service and in-service teachers feedback on the use of research supported and locally valued social-justice teaching practices. It has demonstrated content validity and interrater reliability. It can be used by both researchers and practitioners as a tool to aid educators in meeting the needs of the diverse students they serve. However, the TSJFA represents only one possibility of teaching for social justice. In order to realize education's liberatory potential, researchers and teacher educators must look both through and outside the TSJFA in order to hold

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onto the problem of social justice, not just the question. It is only by holding onto this

prophetic possibility of a justice-yet-to-come that teaching and teacher education can

continue to strive towards the goal of making educational systems work for all.

APPENDIX A

PHILISOPHICAL CONCEPT GLOSSARY

The below glossary provides a brief definition of key philosophical concepts used through this dissertation. Definitions were constructed using insights from Bell (2018), Atkins (2015), Holland (2013) and Massumi (1992) in conjunction with Deleuze and Guattari's (1980/1987) *A Thousand Plateaus: Capitalism and Schizophrenia*.

Abstract Machine of Language

> the abstract machine of language is not universal, or even general, but singular; it is not actual, but virtual-real; it has, not invariable or obligatory rules, but optional rules that ceaselessly vary with the variation itself, as in a game in which each move changes the rules. (Deleuze & Guattari, 1980/1987, p. 100).

Deleuze and Guattari use the concept of the abstract machine in general and the abstract machine of language specifically as a way to discuss their radical ontology. Deleuze and Guattari argue that the status of "things" is less important than their relation, focusing on what things do rather than what they are. They use the concept of machines as a way to highlight this interconnectedness; as they articulate, "A machine may be defined as a system of interruptions or breaks" (Deleuze & Guattari, 1972/1977, p. 36). Within the specific context of linguistics, Deleuze and Guattari expand on this ontological framework in order to attend to the materiality of language, or scientific study of language as a "thing." The concept of the abstract machine of language allows them to attend to the pragmatics of language rather than fixate on the perceived constants.

Becoming-minoritarian

> Continuous variation constitutes the becoming-minoritarian of everybody, as
> opposed to the majoritarian Fact of Nobody. Becoming-minoritarian as the
> universal figure of consciousness is called autonomy. (Deleuze & Guattari,
> 1980/1987, p. 106)

Deleuze and Guattari use the concept of becoming-minoritarian to help define the opposite side of the assemblage from the majoritarian ideal. While the majoritarian is sharply bounded and serves a limiting function, the minoritarian is ephemeral and emergent, its attributes expressed in and as its parts. Expressions of the minoritarian mode are not predetermined but rather swerve and arch in interesting and unique ways. The qualities of the minoritarian mode are not assumed *a priori* and, thus, are not simply the 'that which is not,' which stands as the antithesis of the majoritarian. Instead, they can be considered as the excess that is outside the scope of the majoritarian ideal.

Cartography

> The orchid does not reproduce the tracing of the wasp; it forms a map with the
> wasp, in a rhizome. What distinguishes the map from the tracing is that it is
> entirely oriented toward an experimentation in contact with the real. The map
> does not reproduce an unconscious closed in upon itself; it constructs the
> unconscious. It fosters connections between fields, the removal of blockages on
> bodies without organs, the maximum opening of bodies without organs onto a
> plane of consistency. (Deleuze & Guattari, 1980/1987, p. 2)

Deleuze and Guattari use the concept of cartography as a point of intervention into what they see as the dangers of a science fixated on the transcendent ideal. One of

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the principle issue Deleuze and Guattari aim to address is the fixation on presumed

ontological stability of "things." They liken the exercise of defining things to the act of

tracing, of producing a 1:1 representation of the thing itself. This task is one that is

doomed to fail for numerous reasons, but most notably for Deleuze and Guattari that this

fixation on what a thing is comes at the expense at understand what a thing does, and

under what conditions. The use the concept of cartography or "mapping" to correspond

with an effort to understand the process through which a thing functions.

Deterritorialization

> Germany, toward November 20, 1923: on the one hand, the deterritorializing
>
> inflation of the monetary body and, on the other, in response to the inflation, a
>
> semiotic transformation of the reichsmark into the rentenmark, making possible a
>
> reterritorialization. (Deleuze & Guattari, 1980/1987, p. 88)
>
> Deleuze and Guattari use the concept of deterritorialization to discuss how new

concepts, ideas, actions, etc. are made possible within rigid systems and structures which

function to limit this generative possibility. Generally, the concept relates to the

movement by which one leaves a territory, though for Deleuze and Guattari the "one" can

be an idea, a sign, a person, a group, or any other point of reference.

Illocutionary Acts

> …and more generally between speech and certain actions that are accomplished
>
> in speaking (the illocutionary: I ask a question by saying "Is ... ?" I make a
>
> promise by saying "I love you ..."; I give a command by using the imperative,
>
> etc.). These acts internal to speech, these immanent elations between statements
>
> and acts, have been termed implicit or nondiscursive presuppositions, as opposed

to the potentially explicit assumptions by which a statement refers to other

statements or an external action (Ducrot). (Deleuze & Guattari, 1980/1987, p. 77)

Deleuze and Guattari use the concept of illocutionary acts as a way to discuss how

language functions through actions intrinsic to language rather than through

communication or the transference of information. Illocutionary acts are the implicit

commands which are conveyed through language; within the question "is there salt" is

the illocutionary act or command to pass the salt. Deleuze and Guattari content that rather

than one attribute of language, all language is fundamentally illocutionary.

Incorporeal Transformations

…the statements or expressions express incorporeal transformations that are

"attributed" as such (properties) to bodies or contents. In the strata, expressions do

not form signs, nor contents pragmata, so this autonomous zone of incorporeal

transformations expressed by the former and attributed to the latter does not

appear. (Deleuze & Guattari, 1980/1987, p. 504)

Deleuze and Guattari use the concept of incorporeal transformations as a way to

discuss how language functions. Instead of fixating on what language means or how the

transference of information might happen, Deleuze and Guattari focus on how language

effectuates changes through language itself. Incorporeal transformations are changes that

are precipitated through speech. These changes correspond to changes internal to

language as in the example of a man and woman becoming married through the

pronunciation of them as husband and wife.

Major or Royal Science

This is an appropriate place to example, the tendency of the broken line to become a curve, a whole operative geometry of the trait and movement, a pragmatic science of placings-in-variation that operates in a different manner than the royal or major science of Euclid's invariants and travels a long history of suspicion and even repression (we will return to this question later). (Deleuze & Guattari, 1980/1987, p. 108-109)

Deleuze and Guattari use the concept of a major or royal science as a way to discuss the fixation on capturing and defining presumed stable attributes and universal constants. Within the field of linguistics, they use the concept of a major language to discuss the study and fixation on linguistics constants, as Chomsky does with his concept of a "universal grammar." As discussed elsewhere in this glossary, Deleuze and Guattari are concerned with this fixation on what "things" are, and instead aim to reorient science towards an examination of what the conditions of possibilities are that allow for a thing to function.

Majoritarian

The figure to which we are referring is continuous variation, as an amplitude that continually oversteps the representative threshold of the majoritarian standard, by excess or default. In erecting the figure of a universal minoritarian consciousness, one addresses powers (puissances) of becoming that belong to a different realm from that of Power (Pouvoir) and Domination. Continuous variation constitutes the becoming-minoritarian of everybody, as opposed to the majoritarian Fact of Nobody. (Deleuze & Guattari, 1980/1987, p. 106)

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Deleuze and Guattari use the concept of the majoritarian to discuss the transcendent ideal or fix point of reference that is the object of inquiry within a major or royal science. The majoritarian ideal is, in fact, not the majority, as nothing can embody the expressed ideal. Deleuze and Guattari use the concept of the majoritarian to interject into the dualism introduced by Aristotelian hylomorphism that differences between the sensible and the intelligible. However, rather than reinscribe this dualism (for example, reinforce the idea that the difference between the concept of beauty and the adjective beautiful is not degree but kind), Deleuze and Guattari use the relation between the majoritarian and becoming-minoritarian to discuss how the transcendent ideal functions on the same plan (or a philosophy grounded on homomorphism).

Minor or Nomadic Science

It seems that nomad science is more immediately in tune with the connection between content and expression in themselves, each of these two terms encompassing both form and matter. Thus matter, in nomad science, is never prepared and therefore homogenized matter, but is essentially laden with singularities (which constitute a form of content). And neither is expression formal; it is inseparable from pertinent traits (which constitute a matter of expression). (Deleuze & Guattari, 1980/1987, p. 369)]

Deleuze and Guattari use the concept of a minor or nomadic science to discuss a mode of inquiry that focuses on the how "things" function rather than fixate on their ontological properties. Whereas they see a major or royal science as an apparatus of capture, a minor or nomadic science is a process through which new possibilities are created. Deleuze and Parnet demonstrate this with their discussion of "is" and "and":

"Thinking with AND, instead of thinking IS, instead of thinking for IS: empiricism has never had another secrete. Try it, it is a quite extraordinary thought, and yet it is life" (Deleuze & Parnet, 1987, p. 57). "Is" is the apparatus of capture, collapsing the many into the one. "And", on the other hand, functions through the joining of unconnected ideas, the conjunctive synthesis.

Perceptual Semiotics

"Those things which occur to me, occur to me not from the root up but rather only from somewhere about their middle. Let someone then attempt to seize them, let someone attempt to seize a blade of grass and hold fast to it when it begins to grow only from the middle." Why is this so difficult? The question is directly one of perceptual semiotics. It's not easy to see things in the middle, rather than looking down on them from above or up at them from below, or from left to right or right to left: try it, you'll see that everything changes. (Deleuze & Guattari, 1980/1987, p. 23)

Deleuze and Guattari use the concept of a perceptual semiotics as a way to attend to the twin tendencies of the assemblage towards both stasis and change. On the one hand, they see how the how the stable aspects of the assemblage, such as the psydo-constants of language within the abstract machine of language, function through their consistence to make certain things possible. On the other hand, they see the simultaneous tendency towards change which allows for the contingent deployment of those attributes into new situations though new connections. Rather than fixate on either this tendency towards change or stasis independently, the concept of a perceptual semiotics allows for the consideration of both at the same time.

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Virtuality

"Potential" and "virtual" are not at all in opposition to "real"; on the contrary, the

reality of the creative, or the placing-in-continuous variation of variables, is in

opposition only to the actual determination of their constant relations. (Deleuze &

Guattari, 1980/1987, p. 99)

Deleuze and Guattari use the concept of the virtual as a way to discuss an infinite

field of possibilities. This is not to say that anything is possible as some possibilities are

rendered impossible (doing one thing might preclude the possibility of doing something

else); the virtual is a lower-order infinite set. They see the virtual as the set of all possible

movements from a specific point; on a Cartesian plane, a tangent can leave a circle from

an infinite number of points, but is limited by those points which originate on the

circumference of a circle. Deleuze and Guattari see the opposite of the virtual to not be

the real, but rather the actual. Virtualities are real in that they correspond to the potential

for actualization. It is only when a path is chosen (a tangent leaves the circle) that the

constellation of virtual possibilities is foreclosed.

APPENDIX B

SOCIAL JUSTICE TEACHING ATTRIBUTE WITHIN DOMAIN BY ARTICLE

Table 10.

Teaching Practices Identified in Research Articles Categorized by Domain and Attribute.

	Learning Environment				Curriculum		Pedagogy			
	Physical	Identity	Care	Agency	Reflect	Connect	Responsive	Critical	Quality	Feedback
Journal of Teacher Education	4	13	6	6	6	5	8	6	8	8
1. Haviland, 2008	1									
2. Macgilivray & Jennings, 2008					1					
3. Milner, 2008			1	1						1
4. Adair, 2008							1			
5. Rands, 2009		1								
6. McDonough, 2009		1								
7. Pollock, Deckman, Mira, & Shalaby, 2010	1									
8. Young, 2010			1	1		1	1		1	1
9. Agarwal et al., 2010					1	1		1		
10. Chubbuck, 2010									1	
11. Leonard, Brooks, Johnson, & Berry, 2010		1							1	
12. Gay, 2010a							1			
13. Milner, 2010		1	1		1			1		1
14. Mirra & Morrell, 2011				1						
15. Philip, 2011									1	
16. Florian, 2012									1	
17. Irvine, 2012		1								

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Table 10. (continued).

	Learning Environment				Curriculum		Pedagogy			
	Physical	Identity	Care	Agency	Reflect	Connect	Responsive	Critical	Quality	Feedback
18. Rueda & Stillman, 2012		1								
19. Kumar & Hamer, 2012		1		1						1
20. Wager & Foote, 2012					1		1			
21. Brayko, 2013							1			
22. Aguirre, Turner, Bartell, Kalinec-Craig, Foote, McDuffie, & Drake, 2013							1			
23. Collins, 2013		1								
24. Washburn-Moses, 2013										1
25. Whipp, 2013		1			1			1		1
26. Cheatham, Jimenez-Silva, Wodrich, & Kasai, 2014										1
27. Turner & Drake, 2015	1					1				
28. Powers & Duffy, 2016		1								
29. Conklin & Hughes, 2016		1	1							
30. Matias & Grosland, 2016		1	1							
31. Brown & Wever, 2016								1		
32. Zeichner, Bowman, Guillen, & Napolitan, 2016			1				1			
33. Sharkey, Olarte, & Ramirez, 2016					1					
34. Rubin, Abu El-Haj, Graham, & Clay, 2016	1			1					1	
35. Rojas & Liou, 2017						1		1	1	1
36. Gale, Mills, & Cross, 2017		1		1		1			1	

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Table 10. (continued).

	Learning Environment				Curriculum		Pedagogy			
	Physical	Identity	Care	Agency	Reflect	Connect	Responsive	Critical	Quality	Feedback
37. Dyches & Boyd, 2017							1	1		
Teaching and Teacher Education	4	16	24	8	14	4	19	22	21	7
1. Hale, Snow-Gerono, & Morales, 2008		1								
2. Kidd, Sanchez, & Thorp, 2008							1			
3. Milner, 2008a			1	1						1
4. Moss, 2008								1		
5. Robinson & Ferfolja, 2008			1			1				
6. Ross & Chan, 2008		1					1			
7. Skerrett, 2008		1	1		1		1			1
8. Sockman & Sharma, 2008								1	1	
9. Tellez, 2008			1							1
10. Andersson, Hussenius, & Gustafsson, 2009		1								
11. Baskerville, 2009	1		1							
12. Garii & Rule, 2009								1		
13. Gorski, 2009									1	
14. Jordan, Schwartz, & McGhie-Richmond, 2009									1	
15. Miller, 2009									1	
16. Peters & Reid, 2009				1	1	1		1		
17. van Tartwijk, den Brok, Veldman, & Wubbels, 2009		1								

Table 10. (continued).

	Learning Environment				Curriculum		Pedagogy			
	Physical	Identity	Care	Agency	Reflect	Connect	Responsive	Critical	Quality	Feedback
18. Vavrus, 2009		1			1					
19. Clark, 2010			1					1		
20. Conner, 2010			1							
21. Corbett, 2010							1			
22. Cushman, 2010		1								
23. DePalma & Atkinson, 2010					1					
24. Farnsworth, 2010								1		
25. Heydon & Hibbert, 2010							1	1		
26. Hyland & Heuschkel, 2010								1		
27. Milstein, 2010								1		
28. Nixon, 2010			1					1		
29. Schoorman & Bogotch, 2010			1	1			1	1		
30. Alviar-Martin & Ho, 2011		1								
31. Bleicher, 2011					1					
32. Teemant, Wink, & Tyra, 2011							1		1	1
33. Abednia, 2012								1		
34. James, 2012			1							
35. Pantic & Wubbles, 2012			1							
36. Blanchet-Cohen & Reilly, 2013					1			1	1	
37. Buxton, Salinas, Mahotiere, Lee, & Secada, 2013							1			
38. Garri & Appova, 2013								1		

Table 10. (continued).

	Learning Environment				Curriculum		Pedagogy			
	Physical	Identity	Care	Agency	Reflect	Connect	Responsive	Critical	Quality	Feedback
39. Makinen, 2013				1						
40. Uzum, 2013					1					
41. Bekerman & Zembylas, 2014		1								
42. Moscardini, 2014							1			
43. Teemant, Leland, & Berghoff, 2014								1	1	1
44. Walton, Priest, Kowal, White, Brickwood, Fox, & Paradines, 2014								1		
45. Allen, 2015		1								
46. Boylan & Woolsey, 2015			1	1			1		1	
47. Dunkake & Schuchart, 2015			1							
48. Hachfeld, Hahn, Schroeder, Anders, & Kunter, 2015					1		1		1	
49. Joves, Siques, & Esteban-Guitart, 2015;							1			
50. Perumal, 2015			1							
51. Spratt & Florian, 2015		1	1						1	1
52. Brownlee, Scholes, Walker, & Johansson, 2016			1					1	1	
53. Cochran-Smith, Ell, Grudnoff, Haigh, Hill, & Ludlow, 2016			1		1		1	1	1	
54. Coffey & Farinde-Wu, 2016			1		1		1			
55. Consalvo & David, 2016	1									

Table 10. (continued).

	Learning Environment				Curriculum		Pedagogy			
	Physical	Identity	Care	Agency	Reflect	Connect	Responsive	Critical	Quality	Feedback
56. Dover, Henning, Agarwal-Rangnath, 2016					1		1		1	
57. Dutro & Cartun, 2016	1			1		1	1		1	
58. Harman, Ahn, & Bogue, 2016								1		
59. Lai, Li, Ji, Wong, & Lo, 2016									1	
60. Louie, 2016									1	
61. Malins, 2016	1									
62. Regan, Chen, & Verniknoff, 2016			1							1
63. Shapira-Lishchinsky, 2016		1	1				1			
64. Shelton & Barnes, 2016		1								
65. Bartholomaeus, Riggs, & Andrew, 2017		1			1					
66. Bowman & Gottesman, 2017		1								
67. Gomez-Zepeda, Petrenas, Sabando, & Puigdellivol, 2017									1	
68. Lynch & Fisher-Ari, 2017			1							
69. Pantic, 2017		1	1							
70. Rothing, 2017					1					
71. Timberlake, Thomas, & Barrett, 2017					1					
72. Williamson, 2017									1	
73. Dare & Nowicki, 2018				1		1			1	

Table 10. (continued).

	Learning Environment				Curriculum		Pedagogy			
	Physical	Identity	Care	Agency	Reflect	Connect	Responsive	Critical	Quality	Feedback
74. Gindi & Erlich, 2018								1		
75. Lee, Kim, Kim, & Lim, 2018			1	1			1	1	1	
76. McGillicuddy & Devine, 2018									1	
77. Mellom, Straubhaar, Balderas, Ariail, & Portes, 2018							1			
78. Sondel, Baggett, & Dunn, 2018			1					1		
Total	8	29	30	14	20	9	27	28	29	15

APPENDIX C

SEMI-STRUCTURED INTERVIEW QUESTIONS

1) How do you define the term "Social Justice?"

2) What are some experiences, scholars, or texts that you have found insightful in constructing this definition?

3) What comes to mind when someone refers to themselves as a social justice educator?

4) What are some other terms that you might use, other than social justice, to describe these same commitments?

5) Why those terms? Are there others that you refuse?

6) What does it mean for a teacher to enact social justice in their classroom?

7) What are some actions or behaviors you would expect to see from a teacher who enacts social justice in their classroom? Or how do you know social justice pedagogy when you see it?

8) How do you enact social justice in your teaching practices?

9) Can you share some examples of how your teaching practices has changed as a result of your work in the UOTeach program?

10) In your mind, what differentiates UOTeach from other teacher preparation programs?

11) Are there any other questions I should have asked?

APPENDIX D

FOCUS GROUP DISCUSSION QUESTIONS

1) How do you define the term "Social Justice?"

2) How much do you value Social Justice in your future teaching and why do you think it is important?

3) Do you think teaching for social justice will help you in the future and, if so, how?

4) What are some issues and barriers you see to teaching for social justice?

APPENDIX E

NOMINAL GROUP TECHNIQUE PROCEDURES

Materials:

Whiteboard markers, paper/pencil for participants, audio recorder

Procedure:

1) Informed consent forms are distributed to participants. Participants are encouraged to ask any questions the might have. Participants then may either sign the form or exit from the focus group.

2) Participants are informed that audio recording will start.

3) Introduction and explanation: The Principle Investigator welcomes participants and explains the purpose of the focus group is to identify key teacher classroom behaviors associated with social justice. The Principle Investigator then will outline the procedures for the Nominal Group Technique.

4) Silent generation of ideas: The Principle Investigator will provide participants with a pencil and sheet of paper with the question: "What are some key teacher classroom behaviors associated with social justice" at the top. Participants are instructed to write down all ideas that come to mind when considering the question. During this period, the Principle Investigator will request that participants not discuss their ideas with other participants.

5) Sharing ideas: After five minutes, the Principle Investigator will invite participants to share the ideas that they have generated. The Principle Investigator will record each idea on the whiteboard. Each participant will be allowed an opportunity to share an idea sequentially in turn until all unique ideas have been recorded. During this period, the Principle Investigator will continue to request that participants do not discuss ideas.

6) Group discussion: the Principle Investigator invites participants to ask clarifying questions or for further detail about any of the ideas shared during the previous step. Participants may also suggest new items to include on the list and for discussion or combine items into categories. No items should be eliminated.

7) Voting and ranking: Participants will then be asked to rate each category as most important (5), very important (3), or somewhat important (1) 0n a 3" x 5" card. Participants were told to leave un-important categories unscored. The 3" x 5" cards are then collected and the votes tallied

8) The items and their rankings are recorded in the Principle Investigator's field notes and final rankings shared with the group. The audio recording ends. The group is dismissed.

APPENDIX F

NOMINAL GROUP TECHNIQUE PROMPT SHEET

[PROGRAM] Social Justice Focus Group Worksheet

In the space below, please generate a list of key teacher practices associated with social justice.

TEST BLUEPRINT

Table 11.
Test Blueprint for the TSJFA

Indicator	Physical Environment			Classroom Atmosphere		
	Decorations	Student work	Classroom arrangement	Relationship	Needs	Peer
Representation of individuals from diverse backgrounds	1					
Non-stereotypical representations	1					
Student work prominently displayed		1				
Decorations including student work are inclusive of all students		1				
Decorations including student work include different types of works						
Decorations including student work are free of value judgements		1				
Students are arranged in groups			1			
Student are arranged to foster dialogue across different perspectives			1			
Student groupings are heterogeneous			1			
The teacher explicitly models, demonstrates, explains, and provides opportunities for students to engage in conflict resolution skills						1
The teacher explicitly models, demonstrates, explains, and provides opportunities for students to take different viewpoints						1
The teacher explicitly models, demonstrates, explains, and provides opportunities for students to engage in social learning strategies						1

Table 11. (continued).

Indicator	Physical Environment			Classroom Atmosphere		
	Decorations	Student work	Classroom arrangement	Relationship	Needs	Peer
The teacher explicitly models, demonstrates, explains, and provides opportunities for students to engage in self-awareness practices						1
The teacher address students by name				1		
The teacher greets students as they enter the classroom				1		
The teacher inquiries about non-academic issues				1		
The teacher makes explicit connections between learning materials and students' lives				1		
The teacher validates students' emotions						
The teacher encourages students to express identities, points of view, opinion, experiences in class work.					1	
The teacher demonstrates a sense of openness and humility					1	
The teacher demonstrates appreciation of student contributions to the class.						

Blueprint for Curriculum and Pedagogy

Indicator	Curriculum		Pedagogy		
	Inclusive	Social	Critical	Student-directed	High academic standard
Representation of individuals from diverse backgrounds	1				
Non-stereotypical representations	1				
Materials stimulate student-directed inquiry		1			
Materials connect to the broader social context		1			
Materials critically engage community challenges and issues.		1			

Table 11. (continued).

Indicator	Curriculum		Pedagogy		
	Inclusive	Social	Critical	Student-directed	High academic standard
The teacher explicitly models, demonstrates, explains, and provides opportunities for students to experience inquiry as a goal rather than method of learning				1	
The teacher explicitly models, demonstrates, explains, and provides opportunities for students to use active listening skills				1	
The teacher explicitly models, demonstrates, explains, and provides opportunities for students to proactive strategies to ensure equal participation				1	
The teacher explicitly models, demonstrates, explains, and provides opportunities for students to respect multiple perspectives				1	
The teacher explicitly models, demonstrates, explains, and provides opportunities for students to make text-to-text, text-to-self, and text-to-world connections			1		
The teacher explicitly models, demonstrates, explains, and provides opportunities for students to analyze prevailing, dominate culture interpretations of texts			1		
The teacher explicitly models, demonstrates, explains, and provides opportunities for students to produce alternative interpretations of the texts that typically go unexamined by dominate culture interpretations of texts.			1		
The teacher explicitly models, demonstrates, explains, and provides opportunities for students to defend alternative interpretations of the texts			1		
All students receive honest feedback on work					1
All students received constructive feedback on work					1

Table 11. (continued).

Indicator	Curriculum		Pedagogy		
	Inclusive	Social	Critical	Student-directed	High academic standard
Feedback is equitably distributed according to the needs of the students					1
Assessment, evaluation, and grading are values-based					1

TSJFA ITEM REVIEW SURVEY

PRINCIPAL INVESTIGATOR
Matthew C. Graham
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 541.346.3404
 mgraham@uoregon.edu
Mapping Social Justice: A Multidimensional Cartography
Online Consent Form
My name is Matthew Graham. I am a Ph.D. candidate in the Department of Education Studies. I am conducting an anonymous survey review a new social justice teacher observational protocol. Your participation will require approximately 30 minutes and is completed online at your computer. There are some minor risks involved with you participation in this study. First, there exists the potentiality that identifiable data is inadvertently disseminated, representing a loss of privacy and breach of confidentiality. The likelihood that this happens is considered extremely low, as all data will be collected online anonymously. Second, it is possible that your participation in a survey about social justice might induce stress. The likelihood of this happening is low, as social justice is an important focus of your preservice teacher preparation. However, if you do experience stress at any point during the survey, please discontinue your participation and either contact the Principle Investigator (mgraham@uoregon.edu) and/or contact the University of Oregon free stress-management consultant services at 541.346.2770. There may be other risks that I am unaware of at this time.

Taking part in this study is completely voluntary. If you choose to be in the study you can withdraw at any time without adversely affecting your relationship with anyone at the University of Oregon. Your responses will be kept strictly confidential, and digital data will be stored in secure computer files. Any report of this research that is made available to the public will not include your name or any other individual information by which you could be identified. Deidentified data will be retained and potential used for secondary analyses at a future date by either the Principle Investigator or other researchers.

If you have questions or want a copy or summary of this study's results, you can contact the researcher at the email address above. If you have any questions about your rights as a research subject, you may contact: Research Compliance Services, University of Oregon at (541) 346-2510 or ResearchCompliance@uoregon.edu   Please print a copy of this material for your records.   Clicking the "Next" button below indicates that you are 18 years of age or older, and indicates your consent to participate in this survey.

Page Break

For each of the following attributes, indicate how important and relevant it is for evaluating how teachers enact social justice in their classrooms and select all the indicators which align with the attribute.

Attribute 1: Classroom visual displays depict historically marginalized groups while avoiding stereotypes.

Please rate the above attribute for how relevant it is to measuring social justice.

○ Highly relevant

○ Quite relevant

○ Somewhat relevant

○ Not relevant

Please rate the above attribute in terms of how important it is to measuring social justice.

○ Essential

○ Useful but not essential

○ Not necessary

Please select all the indicators which align with the above attribute.

☐ Visual displays include non-stereotypical depictions of racial/ethnic minorities

☐ Visual displays include non-stereotypical depictions of gender identity minorities

☐ Visual displays include non-stereotypical depictions of sexual identity minorities

☐ Visual displays include non-stereotypical depictions of ability minorities

☐ Visual displays include non-stereotypical depictions of other cultural dimensions

Please include any other indicators you feel might align with the above attribute.

Page Break

Attribute 2: Classroom visual displays celebrate students' work and achievements.

Please rate the above attribute for how relevant it is to measuring social justice.

○ Highly relevant

○ Quite relevant

○ Somewhat relevant

○ Not relevant

Please rate the above attribute in terms of how important it is to measuring social justice.

○ Essential

○ Useful but not essential

○ Not necessary

Please select all the indicators which align with the above attribute.

☐ Visual displays including student work are prominently displayed in the classroom

☐ Visual displays including student work are inclusive of all students

☐ Visual displays including student work include different types of works

☐ Visual displays including student work are free of value judgement

Please include any other indicators you feel might align with the above attribute.

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Attribute 3: Classroom arrangement is designed to facilitate collaborative learning.

Please rate the above attribute for how relevant it is to measuring social justice.

◯ Highly relevant

◯ Quite relevant

◯ Somewhat relevant

◯ Not relevant

Please rate the above attribute in terms of how important it is to measuring social justice.

◯ Essential

◯ Useful but not essential

◯ Not necessary

Please select all the indicators which align with the above attribute.

☐ Students are arranged in groups to allow collaboration

☐ Student groupings are gender-neutral

☐ Student are arranged to foster dialogue across different perspectives

Please include any other indicators you feel might align with the above attribute.

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Attribute 4: The teacher facilitates positive peer-to-peer engagement

Please rate the above attribute for how relevant it is to measuring social justice.

○ Highly relevant

○ Quite relevant

○ Somewhat relevant

○ Not relevant

Please rate the item above attribute in terms of how important it is to measuring social justice.

○ Essential

○ Useful but not essential

○ Not necessary

Please select all the indicators which align with the above attribute.   The teacher explicitly models, demonstrates, explains, and provides opportunities for students to:

☐ Engage in social learning strategies

☐ Engage in emotional learning strategies

☐ Engage in reflective practices

☐ Engage in self-awareness practices

☐ Engage in problem-solving skills

☐ Engage in conflict resolution skills

☐ Take different viewpoints

Please include any other indicators you feel might align with the above attribute.

Page Break

Attribute 5: The teacher engages students on a personal level.

Please rate the above attribute for how relevant it is to measuring social justice.

○ Highly relevant

○ Quite relevant

○ Somewhat relevant

○ Not relevant

Please rate the above attribute in terms of how important it is to measuring social justice.

○ Essential

○ Useful but not essential

○ Not necessary

Please select all the indicators which align with the above attribute.

☐ The teacher address students by name

☐ The teacher makes explicit connections between learning materials and students lives

☐ The teacher inquires about non-academic issues

Please include any other indicators you feel might align with the above attribute.

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Attribute 6: The teacher honors student experiences.

Please rate the above attribute for how relevant it is to measuring social justice.

○ Highly relevant

○ Quite relevant

○ Somewhat relevant

○ Not relevant

Please rate the above attribute in terms of how important it is to measuring social justice.

○ Essential

○ Useful but not essential

○ Not necessary

Please select all the indicators which align with the above attribute.

☐ The teacher validates students' emotions

☐ The teacher demonstrates a sense of openness and humility

☐ The teacher allows students to define their own identities

☐ The teacher models, demonstrates, explains and provides students oppertunities to develop intergroup awareness and understanding

☐ The teacher demonstrates appreciation of student contributions to discussion

Please include any other indicators you feel might align with the above attribute.

Page Break

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Attribute 7: Instructional materials depict historically marginalized groups while avoiding stereotypes.

Please rate the above attribute for how relevant it is to measuring social justice.

○ Highly relevant

○ Quite relevant

○ Somewhat relevant

○ Not relevant

Please rate the above attribute in terms of how important it is to measuring social justice.

○ Essential

○ Useful but not essential

○ Not necessary

Please select all the indicators which align with the above attribute.

☐ Instructional materials include non-stereotypical depictions of racial/ethnic minorities

☐ Instructional materials include non-stereotypical depictions of gender identity minorities

☐ Instructional materials include non-stereotypical depictions of sexual identity minorities

☐ Instructional materials include non-stereotypical depictions of ability minorities

☐ Instructional materials include non-stereotypical depictions of other cultural dimensions

Please include any other indicators you feel might align with the above attribute.

Attribute 8: Instructional materials connect to contemporary social issues.

Please rate the above attribute for how relevant it is to measuring social justice.

○ Highly relevant

○ Quite relevant

○ Somewhat relevant

○ Not relevant

Please rate the above attribute in terms of how important it is to measuring social justice.

○ Essential

○ Useful but not essential

○ Not necessary

Please select all the indicators which align with the above attribute.

☐ Materials stimulate student-directed inquiry

☐ Materials stimulate student reflection about community challenges and issues.

☐ Materials connect to the broader social context

Please include any other indicators you feel might align with the above attribute.

Page Break

Attribute 9: The teacher facilitates student-directed inquiry.

Please rate the above attribute for how relevant it is to measuring social justice.

○ Highly relevant

○ Quite relevant

○ Somewhat relevant

○ Not relevant

Please rate the above attribute in terms of how important it is to measuring social justice.

○ Essential

○ Useful but not essential

○ Not necessary

Please select all the indicators which align with the above attribute.

☐ Experience inquiry as a goal rather than method of learning

☐ Use active listening skills

☐ Proactive strategies to ensure equal participation

☐ Respect for multiple perspectives

☐ Incorporation of multiple perspectives

Please include any other indicators you feel might align with the above attribute.

Page Break

Attribute 10: The teacher facilitates critical engagement with materials.

Please rate the above attribute for how relevant it is to measuring social justice.

○ Highly relevant

○ Quite relevant

○ Somewhat relevant

○ Not relevant

Please rate the above attribute in terms of how important it is to measuring social justice.

○ Essential

○ Useful but not essential

○ Not necessary

Please select all the indicators which align with the above attribute.   The teacher explicitly models, demonstrates, explains, and provides opportunities for students to:

☐ Analyze prevailing, dominate culture interpretations of texts

☐ Produce alternative interpretations of the texts that typically go unexamined by dominate culture interpretations of texts.

☐ Defend alternative interpretations of the texts

☐ Make text-to-text connections

☐ Make text-to-self connections

☐ Make text-to-world connections

Please include any other indicators you feel might align with the above attribute.

Attribute 11: The teacher holds all students to a high standard.

Please rate the above attribute for how relevant it is to measuring social justice.

○ Highly relevant

○ Quite relevant

○ Somewhat relevant

○ Not relevant

Please rate the above attribute in terms of how important it is to measuring social justice.

○ Essential

○ Useful but not essential

○ Not necessary

Please select all the indicators which align with the above attribute.

☐ All students receive honest feedback on work

☐ All students received constructive feedback on work

☐ Feedback is equitably distributed according to the needs of the students

☐ Assessment, evaluation, and grading are values-based

Please include any other indicators you feel might align with the above attribute.

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Please select domain each attribute best aligns with.

	Environment	Atmosphere	Curriculum	Instruction	Other
Classroom visual displays depict historically marginalized groups while avoiding stereotypes.	○	○	○	○	○
Classroom visual displays celebrate students' work and achievements.	○	○	○	○	○
Classroom arrangement is designed to facilitate collaborative learning.	○	○	○	○	○
The teacher facilitates positive peer-to-peer engagement.	○	○	○	○	○
The teacher engages students on a personal level.	○	○	○	○	○
The teacher honors students' experiences.	○	○	○	○	○
Instructional materials depict historically marginalized groups while avoiding stereotypes.	○	○	○	○	○
Instructional materials	○	○	○	○	○

connect to contemporary social issues.					
The teacher facilitates student-directed inquiry.	○	○	○	○	○
The teacher facilitates critical engagement with material.	○	○	○	○	○
The teacher holds all students to a high standard.	○	○	○	○	○

_____

Page Break

- -

If there are any important attributes omitted, please list them in the space provided below.

_____

_____

_____

_____

Page Break

Thank you for taking time out to participate in our survey. Your responses have been saved anonymously. We truly value the information you have provided, which we will use to refine a formative tool for examining social justice in teacher practices.

TEACHING FOR SOCIAL JUSTICE FORMATIVE ASSESSMENT

Observer: _____ Teacher: _____ School: _____

Grade(s): _____ Subject(s):_____ Observation Time: _____ to _____

Observational Notes:

Checklist:

Environment		
1. Classroom Decorations	**2. Student Work**	**3. Classroom Arrangement**
Classroom visual displays of or articles of affirmation for historically marginalized groups while avoiding stereotypes.	Classroom visual displays celebrate students' work and achievements.	Classroom arrangement is designed to facilitate collaborative learning.
□ Decorations include no depictions or articulations of affirmation □ Decorations include stereotypical depictions of historically marginalized groups Decorations include non-stereotypical depictions of or articulations of affirmation for: □ racial/ethnic minorities □ gender identity minorities □ sexual identity minorities □ ability minorities □ other cultural dimensions	□ Decorations including student work are prominently displayed (visible on entry/front of classroom) □ Decorations including student work are inclusive of all students □ Decorations including student work include different types of works □ Decorations including student work are free of value judgements	□ Students are fixed in rows □ Part of lesson □ Most of lesson □ Assigned seating □ Not assigned seating □ Students are arranged in groups □ Part of lesson □ Most of lesson □ Assigned seating □ Not assigned seating □ Homogenous groups □ Heterogeneous groups
Comments		

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Atmosphere		
4. Positive Peer-to-Peer Engagement	**5. Personal Connections**	**6. Honoring Students' Experiences**
The teacher facilitates positive peer-to-peer engagement.	**The teacher engages students on a personal level.**	**The teacher honors student experiences.**
□ Students do not have opportunities to engage in discussion □ Students have opportunities to engage in discussion only with the teacher Students have opportunity to engage each other □ In small groups □ In large groups Students capitalize on opportunities to engage each other □ In small groups □ In large groups	□ The teacher address students by name □ The teacher makes personal connections with students □ The teacher inquiries about non-academic issues □ The teacher makes explicit connections between learning materials and students' lives	□ The teacher validates students' emotions □ The teacher encourages students to express identities, points of view, opinion, and experiences in class work. □ The teacher demonstrates appreciation of student contributions to the class. □ The teacher uses inclusive language
Comments		

Materials	
7. Depictions of Historically Marginalized Groups	**8. Connection to Social Issues**
Instructional materials depict historically marginalized groups while avoiding stereotypes.	**Instructional materials connect to contemporary social issues.**
□ No depictions of historically marginalized groups present in materials □ Materials include stereotypical depictions of historically marginalized groups. □ Materials include non-stereotypical depictions of: 　□ racial/ethnic minorities 　□ gender identity minorities 　□ sexual identity minorities 　□ ability minorities 　□ other cultural dimensions	□ Materials connect to the broader social context □ Materials critically engage community challenges and issues. □ Materials stimulate student-directed inquiry
Comments	

Instruction		
9. Student-directed Inquiry	**10. Critical Engagement**	**11. High Academic Standard**
The teacher facilitates student-directed inquiry.	**The teacher facilitates critical engagement with materials.**	**The teacher holds all students to a high standard.**
□ Teacher predominantly lectures □ Teacher uses demonstrations □ Teacher uses verification activities (answers can easily be adjudicated as correct or incorrect) □ Teacher uses problem-based activities 　□ Part of the time 　□ Most of the time	Students use the materials to make: 　□ text-to-text connections 　□ text-to-self connections 　□ text-to-world connections □ Students analyze prevailing, dominate culture interpretations of texts □ Students produce alternative interpretations of the texts □ Students defend alternative interpretations of the texts	□ The teacher provides detailed feedback The teacher highlights 　□ Areas of excellence 　□ Opportunities for growth □ Feedback is equitably distributed according to the needs of the students
Comments		

Rubric:

Attribute	Not present	Minimally Present	Somewhat Present	Present	Developed
Environment					
1. Classroom Decorations	1	2	3	4	5
2. Student Work	1	2	3	4	5
3. Classroom Arrangement	1	2	3	4	5
Overall Rating: Environment					
Atmosphere					
4. Peer-to-Peer Engagement	1	2	3	4	5
5. Personal Connections	1	2	3	4	5
6. Honoring Students' Experiences	1	2	3	4	5
Overall Rating: Atmosphere					
Curriculum					
7. Depictions of Historically Marginalized Groups	1	2	3	4	5
8. Connection to Social Issues	1	2	3	4	5
Overall Rating: Curriculum					
Instruction					
9. Student-directed Inquiry	1	2	3	4	5
10. Critical Engagement	1	2	3	4	5
11. High Academic Standard	1	2	3	4	5
Overall Rating: Instruction					
Total Rating					

TSJFA

Teaching for Social Justice Formative Assessment

Assessment Handbook

UNIVERSITY OF OREGON

Content

Notes

Introduction to the TSJFA

A student walks into a clean and colorfully decorated classroom. Hanging on the front wall are pictures of the U.S. Founding Fathers and a copy of the U.S. Declaration of Independence. On the side walls are exemplary student work celebrating the best of the class; only a few of the 30 students earning such recognition. The desks are arranged facing forwards in neat rows with wide aisles as to focus the students' attention front-and-center and discourage side conversations during lessons. The student opens their textbook to find repetition in who is present in both the pictures and the text; white, heterosexual, cisgender, able-bodied, middle-to-upper class males with a disproportionately small number of white, heterosexual, cisgender, able-bodied, middle-to-upper class females. Absent is any depiction of difference, let alone thoughtful interrogation of the underpinning conception of knowledge tacitly at work through the text to the privilege of some and to the detriment of others. The teacher begins the lesson, standing in the front of the classroom and directing the student through their exercises; the teacher functioning as the arbiter of knowledge, the student as a passive vessel to be filled. The student responds to the teacher's prompts, both verbal and written, and the teacher assess the student's grasp of the material. Correct answers are rewarded with both positive affirmation and good grades, exceptionality with public recognition. Incomplete or inadequate responses are meet with redirection, reteaching, increasingly punitive punishments, and poor marks – marks that play a significant role in defining the student's future.

Unfortunately, the above story is one that is all too real for many students in schools. Decades of research has demonstrated that our educational intuitions continue to fail to meet the needs of the diverse students they serve. We currently live in a society replete with inequity, where the opportunities available to some are systematically denied to others. Although education may not be primarily responsible, it has often been both complacent and, at times, an instrument for perpetuating this injustice. Rather than an inclusive space, schools continue to reinforce a dominate narrative of exclusivity through classroom arrangement and decoration, the learning atmosphere, curricular materials, and pedagogical strategies employed. Although the perpetuation of current social systems is of non-trivial consequence to everyone, it is particularly damaging to students from groups that have been historically marginalized, including individuals identified as racial and ethnic minorities, gender minorities, sexual minorities, differently-abled, and working class. Despite this, education also has the potential to liberate, creating new possibilities and opportunities for those disenfranchised by current social systems.

Purpose of the TSJFA

Within the fields of teaching and teacher education, an important step in realizing this educations liberatory potential is access to tools that help individuals understand how to realize social justice in the classroom. Such a tool can generate new opportunities for teachers and teachers-in-training to reflect on this important work. The Teaching for Social Justice Formative Assessment (TSJFA) is designed to provide this feedback. The TSJFA is designed to provide structured feedback about the inclusion of specific, observable research-supported and locally-valued markers of social justice education teaching to provide individual and programmatic feedback. By identifying opportunities for individual growth, this instrument aims to assist teachers in realizing the UO College of Education mission: "To make educational and social systems work for all".

Overview of the Assessment

The TSJFA evaluates the presence of observable markers of social justice teaching across four domains:

1. Classroom Environment
2. Classroom Atmosphere
3. Materials
4. Instruction

In each domain, an observer evaluates the relative presence of 2-4 markers of social justice teaching over the course of a one-hour learning segment. The specific behaviors in each domain were developed by triangulating social justice teaching practices identified in contemporary educational research in relation to local teacher education faculty, educational researchers, and pre-service and in-service teachers.

Structure of this Handbook

The following pages provide specific instruction on how each attribute within the domains should be conducted. In each section, you will be provided an overview of each domain, an introduction to the key terms and concepts in each behavior attribute. You will then be provided strategies and examples of how to evaluate a classroom for the presence of specific behaviors. Finally, you will be provided an annotated Attribute for each behavior.

In the final section, you will find complete, unannotated assessment instrument and instruction as to how to complete the evaluation. At the end, you will find a space for including your own notes which may help you in completing this assessment.

Domain I: Classroom Environment

What is "Classroom Environment"?

The first two Domains of the TSJFA – "**Classroom Environment**" and "**Classroom Atmosphere**" – fall within a larger domain called "**Learning Environment**". **Learning Environments** refer to the physical locations, contexts, and cultures in which students learn. This includes everything from physical attributes of the classroom (desks, tables, bulletin boards, etc.) to how students relate to each other and to the teacher.

Classroom Environment specific refers to the physical attributes of the learning environment. These aspects are directly visible; you will be able to observe these attributes as you enter the classroom. Although many attributes within the classroom environment have a significant impact on student learning (instructional media, classroom lighten, physical temperature), some of these are not directly malleable by the teacher. Within the context of this assessment, the focus is on physical attributes of the learning environment which teachers can directly and easily control; **Classroom Visual Displays** and **Classroom Organization and Orientation**.

Classroom Visual Displays refers to the semi-permanent decorations which adorn the classroom, including bulletin boards and posters. Although teachers often have direct control on what is displayed in the classroom and can adjust these attributes with relative ease, these displays exist in the classroom for multiple days, weeks, or even longer. These semi-permanent displays are different than lesson-specific visual displays in that they last longer than a visual tool utilized in service of a single lesson. Classroom Visual Displays are subdivided into two categories: **Classroom Decorations** and **Student Work**.

Classroom Decorations refers to those visual attributes of the learning environment curated by the teacher in order to provide a visual backdrop to learning. Often, teachers purchase or are provided professional designed and printed posters, magnates, and/or hanging displays. Other times, students participate in producing classroom decorations which are meaningful to them. Regardless, these works are non-subject related or subject-general; they do not correspond to the topic of a single lesson nor provide students opportunities to demonstrate their content knowledge (when student developed).

Student Work refers to those visual attributes of the learning environment which celebrate student knowledge and achievement. This differs from student-developed classroom decorations in that student work refers to visual displays in which students are able to demonstrate their comprehension of course materials (in contrast, student-developed classroom decorations are subject general). Significant student works (such as capstone activity) which are presented in a lesson and then posted within the classroom are prime example of student work.

Classroom Organization and Orientation refers to the arrangement and direction of the learning environment. How students are situated in relation to each other and to the teacher has a significant impact of what learning strategies can easily be employed and impacts the relationship of students with each other and with the teacher.

How do I evaluate the environment for evidence of Social Justice?

Within the context of this assessment, you will evaluate the **Classroom Environment** for markers of social justice in three areas:

1. Classroom Decorations
2. Student Work
3. Classroom arrangement

Classroom Decorations

Key in fostering equity through the physical attributes of the learning environment is the inclusion of **Non-stereotypical Representations** of and **Articulations of Affirmation and Support** for **Historically Marginalized Groups**. Therefore, you will be asked to evaluate the degree to which each classroom you observe includes such representations. **Historically Marginalized Groups** refers to categorizations of individuals who have been systematically denied opportunities and access due to others' perceptions of their identity. This is not to essentialize the experience of these individuals, but rather an articulation that these aspects of identity have been made salient through others' perception and response to those identities. Within the context of this instrument, you will be specifically examine this in relation to representations of **Racial/Ethnic Minorities**, **Gender Minorities, Sexual Identity Minorities, and Ability Minorities.** This does not suggest that these are the only identity categories which have been historically marginalized.

Non-stereotypical Representations refers to depictions which go beyond perceived and often uncritically accepted dominate cultural representations of historically marginalized groups (See Appendix X: Stereotypical Representations). Non-stereotypical representations provide authentic portrayals of racial/ethnic, gender, sexual, and ability minorities engaging in diverse, rich, and complex social and professional situations.

Articulations of Affirmation and Support refers to classroom visual displays which demonstrate commitment, solidarity, and support for historically marginalized groups. This includes signage which specifically address historically marginalized groups (e.g. general articulations of inclusivity and support for diversity are insufficiently details).

Student Work

Also key in fostering equity through the physical attributes of the learning environment is showcasing **Students' Work**. Student work differs from student-developed **Classroom Decorations** in that **Student Work** relate specifically to how student(s) demonstrate content mastery and are connected to expressed learning objectives. Displaying student work functions as a celebration of what students have learned and serves to motivate the learning community to continue to engage and grow. To do so in an equitable manor, Student Work must be **Prominently Displayed**, **Free of Value Judgements**, and **Inclusive of All Students**.

Student Work is prominently displayed when it is visible either when entering the classroom or directly in front of students during instruction. For student work to be prominently displayed, then, it should be opposite the main door or in front of the majority of students (likely behind the teacher).

Student Work is free of value judgements when it is supportive of Growth rather than Fixed Mindset. That is, Student Work should be celebrated as a demonstration of students' hard work, not academic performance. It is not free of value judgements when the work celebrates only demonstration of content mastery, has grades, or compares students to each-other. Student work that does not have any directly visible organizational schema is also free of value judgement.

Student work is inclusive of all students when there is ample space and opportunity for all students to have work displayed in the classroom. Tandem with free of value judgements, displaying only exceptional student works is not inclusive of all students.

Classroom Arrangement

Key in fostering equity through the attributes of the learning environment is the **Classroom Arrangement**. How students are organized in the classroom has a profound effect on how students relate to each other and to the teacher. Therefore, you will be asked to evaluate the degree to which the classroom arrangement facilities equity. Equitable classroom arrangements involve organizing students in such a way as to facilitate **Cooperative Learning**. **Cooperative Learning** is a teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject. Rather than focus student's attention forward and focusing attention on the teacher, students should be arranged in diverse groups

Classroom Environment Attributes
Attribute 1: Classroom Decorations

Classroom decorations depict or articulate support for historically marginalized groups while avoiding stereotypes.				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
No representations or articulations of affirmation and support included in classroom decorations of historically marginalized groups OR Only dominate-group represented in classroom decorations	Stereotypical representations of historically marginalized groups AND No articulations of affirmation and support of historically marginalized groups	Non-stereotypical representation or articulation of affirmation and support of at least one historically marginalized group BUT ALSO Stereotypical or marginalizing representation of historically marginalized groups	Non-stereotypical representation or articulation of affirmation and support of one historically marginalized group AND No stereotypical or marginalizing representations of historically marginalized groups	Non-stereotypical representation or articulation of affirmation and support of more than one historically marginalized group AND No stereotypical or marginalizing representations of historically marginalized groups

Attribute 2: Student Work

Classroom decorations celebrate students' work.				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Classroom decorations do not include student work.	Classroom decorations include student work but student work is not prominently displayed, free of value judgements, or showcase different types of works.	Decorations include student work and are either prominently displayed, free of value judgements, inclusive of all students, or showcase different types of work.	Decorations include student work and are either prominently displayed and free of value judgements OR Prominently displayed and showcase different types of work OR Free of value judgements and showcase different types of work.	Decorations include student work and are prominently displayed, free of value judgements, and showcase different types of work.

Attribute 3: Classroom Arrangement

Classroom arrangement is designed to facilitate collaborative learning.				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Desks are fixed in rows oriented towards the teacher with assigned seating.	Desks are arranged in rows oriented towards the teacher without assigned seating.	Desks are arranged in rows oriented towards the teacher, but are rearranged for a portion of the lesson in order to facilitate group work.	Desks are arranged in groups but students are assigned to homogenous groups (e.g. gender segregated) OR Students are not assigned to groups.	Students are arranged in groups so as to foster dialogue across diverse experiences.

Domain II: Classroom Atmosphere

What is "Classroom Atmosphere"?

If **Classroom Environment** corresponds to the physical attributes of the **Learning Environment**, then **Classroom Atmosphere** corresponds to the non-physical aspects, those aspects which are not directly visible. Within the context of this assessment, this includes fostering an atmosphere conducive to **Positive Peer-to-Peer Engagement**, **Personal Connections**, and **Honoring Students' Experiences**.

Positive Peer-to-Peer Engagement refers to an atmosphere in which students are able, willing, and comfortable to engage each other in rigorous academic and non-academic discussions. Students are supportive of each other's learning, willing to challenge or ask for clarification on another's thinking, and willing to admit errors in judgement or gaps in knowledge. Students feel safe and supported in having open and rich dialogues.

Personal Connections refers to an atmosphere in which the teacher is able to demonstrate that their commitment to their students goes beyond their academic responsibilities. The teacher engages students on a non-academic level to better understand their experiences, values, and interests not only to better scaffold instruction, but also to foster deep, personal connections to their students.

Honoring Students' Experiences refers to an atmosphere in which the teacher allows and supports students in developing and expressing their unique, diverse personal identities. The teacher acknowledges and validates students' emotions and demonstrates their appreciation for the contributions made by each member of the learning community.

How do I evaluate the atmosphere for evidence of Social Justice?

Within the context of this assessment, you will evaluate the **Classroom Atmosphere** for markers of social justice in three areas:

1. Positive Peer-to-Peer Engagement
2. Personal Connections
3. Honoring Students' Experiences

Positive Peer-to-Peer Engagement

Key in fostering equity through the **Classroom Atmosphere** is fostering a community which is supportive of **Positive Peer-to-Peer Engagement**. Although much of the underlying aspects of **Classroom Atmosphere** are not directly visible, you will be able to see markers of **Positive Peer-to-Peer Engagement** through the instructional strategies the teacher employs and how students interact with each other.

In a classroom in which the atmosphere is conducive to **Positive Peer-to-Peer Engagement,** the teacher will provide and students will capitalize on opportunities for rich discussions both in small and large groups. In small group discussions, students will be visible engaged with the majority, if not all, students having and taking opportunities to engage. In large group discussions, students will engage directly with each other rather than respond only to teacher prompts. This is visible through sustained conversations with little or no teacher direction.

When the **Classroom Atmosphere** is not conducive to **Positive Peer-to-Peer Engagement,** students are provided little opportunities for rich engagement with the material, are not provided opportunities to engage with each other, or fail to capitalize on opportunities to engage each other.

Personal Connections

Key in fostering equity through the **Classroom Atmosphere** is fostering a community which is supportive of **Personal Connections**. Although much of the underlying aspects of **Classroom Atmosphere** are not directly visible, you will be able to see markers of **Personal Connections** though how the instructor relates and converses with their students regarding non-academic topics.

In a classroom in which the atmosphere is conducive to **Personal Connections,** the teacher greets students informally at the start of the lessons and often make inquiries into personal, non-academic issues and interests. Additionally, the teacher will incorporate these issues and interests into the class so as to connect the material to the students' experiences.

When the **Classroom Atmosphere** is not conducive to **Positive Peer-to-Peer Engagement**, the teacher will fail to greet students as they enter the classroom or at the start of the lesson. They will not take time to engage students in discussing non-academic matters, and will not make explicit connections between the course content and students' experiences. Sometimes, it will seem that the teacher may not even know all students by name.

Honoring Students' Experience

Key in fostering equity through the **Classroom Atmosphere** is fostering a community which is supportive of **Honoring Students' Experiences**. Although much of the underlying aspects of **Classroom Atmosphere** are not directly visible, you will be able to see markers of **Honoring Students' Experiences** though how the instructor relates and converses with their students regarding non-academic topics.

In a classroom in which the atmosphere is conducive to **Honoring Students' Experiences,** the teacher validates students' emotions, both in relation to academic and non-academic issues. This can be as simple as acknowledge both positive and negative emotions students express in class. Additionally, the teacher encourages students to express their identities, points of view, and/or opinions in class without expressing a value judgement. The teacher demonstrates their appreciation of students' engagement and contribution to the class. Finally, the teacher uses inclusive language. For example, avoiding gender-norming language such as "ladies and gentlemen" or "guys".

Classroom Atmosphere Attributes

Attribute 4: Positive Engagement

The teacher models, facilitates, and provides opportunities for students to demonstrate positive peer-to-peer engagement.				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Students have limited time to engage during the lesson and responses are limited to the recitation of rote knowledge	Students are provided opportunities to engage during lesson, but discussions are teacher-centric and provide little opportunity for students to engage with each other	Students are provided and capitalize on opportunities for rich engage with each other in either small or large groups.	Students are provided and capitalize on opportunities for rich engage with each other in either small or large groups.	Students are provided and capitalize on opportunities for rich engage with each other both small groups and large groups

Attribute 5: Personal Connections

The teacher engages students on a personal level.				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
The teacher does not make an effort to engage all members of the class

AND/OR

Fails to identify students by name | The teacher identifies students by name

BUT

does not make an effort to make personal connects with students | The teacher identifies student by name

AND

make an effort to make personal connects with students

BUT

These efforts are relegated to either before or after learning segments. | The teacher identifies students by name

AND

make an effort to make personal connects with students

BUT

Does not make explicit connections between learning materials and students' lives. | The teacher identifies students by name

AND

Make personal connects with students

AND

inquiries about non-academic issues

AND

makes explicit connections between learning materials and students' lives. |

Attribute 6: Honoring Students' Experiences

The teacher honors student experiences.				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
The teacher does not honor students' experiences	The teacher does one of the following: validates students' emotions encourages students to express identities, points of view, opinion, experiences in class work. demonstrates appreciation of students' engagement and contributions to the class. Uses inclusive language.	The teacher does two of the following: validates students' emotions encourages students to express identities, points of view, opinion, experiences in class work. demonstrates appreciation of students' engagement and contributions to the class. Uses inclusive language.	The teacher does three of the following: Validates students' emotions encourages students to express identities, points of view, opinion, experiences in class work. demonstrates appreciation of students' engagement and contributions to the class. Uses inclusive language	The teacher does all of the following: Validates students' emotions encourages students to express identities, points of view, opinion, experiences in class work. demonstrates appreciation of students' engagement and contributions to the class. Uses inclusive language

Domain III: Materials

What are "Materials"?

If **Learning Environments** describe the physical (**Classroom Environment)** and non-physical (**Classroom Atmosphere**) attributes of WHERE learning takes place, **Materials** and **Instructions** address the WHAT and HOW. Specifically, **Materials** involve all items brought into the class in order to facilitate instruction. This includes textbooks, worksheets, and manipulatives which are utilized during the course of instruction, as well as instructional aids such as posters, presentations, or other video aids used during a lesson.

Materials differ from aspects of the **Classroom Decorations** in two important regards. First, **Materials** generally lack the longevity of **Classroom Decorations.** Whereas **Classroom Decorations** are semi-permeant and usually intended to be displayed for weeks, months, or longer, **Materials** are only displayed for the duration of a lesson, often less than one day but no more than a few days. Second, **Materials** are utilized in direct support of a specific learning objective and address specific content. Contrarily, **Classroom Decorations** are more course-general.

Key in fostering equity through **Materials** is the inclusion of **Non-stereotypical Representations** of **Historically Marginalized Groups**. Therefore, you will be asked to evaluate the degree to which the **Materials** used in each lesson you observe include such representations.

Historically Marginalized Groups refers to categorizations of individuals who have been systematically denied opportunities and access due to others' perceptions of their identity. This is not to essentialize the experience of these individuals, but rather an articulation that these aspects of identity have been made salient through others' perception and response to those identities. Within the context of this instrument, you will be specifically examine this in relation to representations of **Racial/Ethnic Minorities**, **Gender Minorities, Sexual Identity Minorities, and Ability Minorities.** This does not suggest that these are the only identity categories which have been historically marginalized.

Non-stereotypical Representations refers to depictions which go beyond perceived and often uncritically accepted dominate cultural representations of historically marginalized groups (See Appendix X: Stereotypical Representations). Non-stereotypical representations provide authentic portrayals of racial/ethnic, gender, sexual, and ability minorities engaging in diverse, rich, and complex social and professional situations. Regardless of whether **Materials** include **Non-stereotypical Representations** of **Historically Marginalized Groups**, another key aspect of social justice educations is that materials connect to contemporary social issues. That is, **Materials** ought to echo and make explicit connections to current social, contextual, and/or political issues.

How do I evaluate Materials for evidence of Social Justice?

Within the context of this assessment, you will evaluate the **Materials** for markers of social justice in two areas:

1. Depictions of Historically Marginalized Groups
2. Connection to Social Issues

Depictions of Historically Marginalized Groups

Key in fostering equity through the **Materials** is the inclusion of **Non-stereotypical Representations** of **Historically Marginalized Groups**. Therefore, you will be asked to evaluate the degree to which the **Materials** include such representations in each classroom you observe.

Given that **Materials** refers to a wide array of medium, **Non-stereotypical Representations** of **Historically Marginalized Groups** might be quite different across different sources. For example, such representations might be included within the written text and stories in a Textbook. Although these depictions are not visual, the inclusion of **Non-stereotypical Representations** of **Historically Marginalized Groups** within the text is one potential way in which **Materials** might support social justice. Images within textbooks and pictures included in PowerPoint slides are another possible method for including **Non-stereotypical Representations** of **Historically Marginalized Groups.**

Connection to Social Issues

Key in fostering equity through the **Materials** is the how those materials explicitly connect to contemporary social issues. Therefore, you will be asked to evaluate the degree to which the **Materials** include such representations in each classroom you observe. To do so, materials should facilitate **Student-Centered Inquiry.**

Rather than materials which support only single-shot activities, **Materials** which support **Student-Centered Inquiry** enable children to conduct long-term investigations. The activities should encourage inquiry, address a variety of learning styles, and connect to other parts of the curriculum. Students should have some autonomy to connect **Materials** to their interests and social issues important to them.

Additionally, **Materials** should stimulate reflection about community challenges and issues and connect to the broader social context. For example, texts could include stories which address contemporary social and political issues.

Materials Attributes
Attribute 7: Depictions of Historically Marginalized Groups

Instructional materials depict historically marginalized groups while avoiding stereotypes.				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Dominate-group represented overwhelmingly represented in texts	Stereotypical representations of historically marginalized groups in texts	Non-stereotypical representation of at least one historically marginalized group BUT ALSO Stereotypical representation of historically marginalized groups	Non-stereotypical representation of one historically marginalized group AND No stereotypical representations of historically marginalized groups	Non-stereotypical representation of more than one historically marginalized group AND No stereotypical representations of historically marginalized groups

Attribute 8: Connection to Social Issues

Instructional materials connect to contemporary social issues.				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Instructional materials do not stimulate student-directed inquiry OR connect to the broader social context	Instructional materials do stimulate student-directed inquiry BUT do not connect to the broader social context	Instructional materials do connect to the broader social context BUT Do not stimulate student-directed inquiry	Instructional materials do connect to the broader social context AND stimulate student-directed inquiry BUT Do not critically engage issues within the broader social context	Instructional materials do connect to the broader social context AND stimulate student-directed inquiry AND critically engage issues within the broader social context

Domain IV: Instruction

What is "Instruction"?

Instructions is HOW a teacher facilitates students' engagement with the instructional **Materials**. This involves the manner in which the teacher presents the material, the degree to which the teacher provides opportunities for students to critically engage the materials, and how the teacher uses the materials to provide feedback to their students. **Instruction** differs from **Classroom Atmosphere** in that it centers on how the teacher relates the **Materials** to students. Conversely, **Classroom Atmosphere** is how the teacher relates directly to their students, and how they foster and atmosphere which is conducive to developing positive relationship between students. Key in realizing social justice through instruction is facilitating **Student-Directed Inquiry**, facilitating **Critical Engagement** with the **Materials**, and holding all students to a **High Academic Standard.**

Student-directed Inquiry is a form of active learning which differs from teacher-directed models of instruction in that it starts by formulating or posing questions rather than presenting facts. In **Student-directed Inquiry,** the teacher assists students in using **Materials** to answer complex questions which have neither simple solutions nor clear pathways to an answer.

Facilitating **Critical Engagement** with the **Materials** involves the teacher modeling, demonstrating, and providing students with an opportunity to analyze prevailing, dominate culture interpretations of texts. Additionally, the teacher may help students produce and defend alternative interpretations of the texts.

Holding all students to a **High Academic Standard** involves providing all students with detailed feedback. This feedback involves providing specific examples of strengths in students' work, as well as highlighting areas for improvement. Key in this is providing clear directions forward for the student.

How do I evaluate Instruction for evidence of Social Justice?

Within the context of this assessment, you will evaluate the **Instruction** for markers of social justice in three areas:

1. Student-directed Inquiry
2. Critical Engagement
3. High Academic Standard

Student-directed Inquiry

Key in fostering equity through Instruction is guiding students' engagement with **Materials** through **Student-directed Inquiry**. Therefore, you will be asked to evaluate the degree to which **Instruction** supports this.

To do so, you will be asked to evaluate both the nature of the learning activates the teacher guides students through as well as the emphasis which is places on each activity. Core instructional activates include **Lecture**, **Demonstration**, **Verification Activities**, and **Conceptual Development Activates**.

Lecture involves the teacher directing students through learning objectives by presenting the **Materials** through which the students are to learn. Similarly, in **Demonstration,** the teacher conducts and activities in order to demonstrate a learning objective to the

students. In both **Lecture** and **Demonstration,** (sometimes together referred to as "direct instruction") students take on a passive role.

Verification Activities are learning opportunities in which the students take a limited active role in constructing their own knowledge. However, students are guided through limited activity towards a pre-determined outcome. **Verification Activities** are often short and focused on a specific learning product.

Conceptual Development Activities are learning opportunities in which the students take an active role in constructing their own knowledge. Students are guided through the activity with limited facilitation from the teacher, and the outcome is general not specifically known beforehand. **Conceptual Development Activities** are often quite long and more broad, particularly when compared to **Verification Activities.**

Critical Engagement

Key in fostering equity through **Instruction** is Facilitating students' **Critical Engagement** with the **Materials**. Therefore, you will be asked to evaluate the degree to which **Instruction** supports this.

In order for the teacher to facilitate **Critical Engagement** with the **Materials,** they must model, demonstrate, and provides students an opportunity to analyze prevailing, dominate culture interpretations of **Materials**. Additionally, the teacher should model, demonstrate, and provides students an opportunity to produce and defend alternative interpretations of the texts,

High Academic Standard

Key in fostering equity through **Instruction** is holding all students to a **High Academic Standard**. Therefore, you will be asked to evaluate the degree to which **Instruction** supports this.

Holding all students to a **High Academic Standard** involves providing all students with detailed feedback. This feedback involves providing specific examples of strengths in students' work, as well as highlighting areas for improvement. Key in this is providing clear directions forward for the student.

Instructions Attributes
Attribute 9: Student-directed Inquiry

The teacher facilitates student-directed inquiry.				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Teacher predominantly lectured to cover content.	Teacher frequently lectured AND Uses demonstrations to explain content. BUT Students do not actively engage in learning activities.	Teacher frequently lectured AND Uses demonstrations to explain content BUT Uses activities which were verification only.	Teacher occasionally lectured BUT students were engaged in individual activities which develop conceptual understanding.	Teacher occasionally lectured BUT students were engaged in group activities which promoted strong conceptual understanding.

Attribute 10: Critical Engagement

The teacher facilitates critical engagement with material.				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
The teacher does not model, demonstrate, explain, or provide students an opportunity to critically engage materials	The teacher models, and demonstrates critical engagement with the material BUT Does not provide opportunities for students to participate in analyzing prevailing, dominate cultural interpretations of texts	The teacher models, demonstrates, and provides students an opportunity to analyze prevailing, dominate culture interpretations of texts BUT Does not model, demonstrate, or provide opportunity for students to produce alternative interpretations of the texts	The teacher models, demonstrates, and provides students an opportunity to analyze prevailing, dominate culture interpretations of texts AND Produce alternative interpretations of the texts BUT Does not mode, demonstrate, or provide students opportunities to defend alternative interpretations of the texts	The teacher models, demonstrates, and provides students an opportunity to analyze prevailing, dominate culture interpretations of texts AND Produce alternative interpretations of the texts AND Defend alternative interpretations of the texts

Attribute 11: High Academic Standard

11. The teacher holds all students to a high standard.				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
The teacher does not provide feedback to any students	The teacher answers if students responses are correct or incorrect	The teacher provides detailed feedback BUT does not highlight specific areas of excellence and opportunities for growth	The teacher provides detailing feedback AND highlights both specific areas of excellence and opportunities from growth BUT Does so only for some student, providing less rich feedback to others.	The teacher provides detailing feedback AND highlights both specific areas of excellence and opportunities from growth AND Does so only for all students.

Teaching for Social Justice Formative Assessment

Observer: _____ Teacher: _____ School: _____

Grade(s): _____ Subject(s):_____ Observation Time: _____ to _____

<div style="border:1px solid black;">

Observational Notes:

</div>

Checklist:

Environment		
1. Classroom Decorations	**2. Student Work**	**3. Classroom Arrangement**
Classroom visual displays of or articles of affirmation for historically marginalized groups while avoiding stereotypes.	Classroom visual displays celebrate students' work and achievements.	Classroom arrangement is designed to facilitate collaborative learning.
□ Decorations include no depictions or articulations of affirmation □ Decorations include stereotypical depictions of historically marginalized groups Decorations include non-stereotypical depictions of or articulations of affirmation for: □ racial/ethnic minorities □ gender identity minorities □ sexual identity minorities □ ability minorities □ other cultural dimensions	□ Decorations including student work are prominently displayed (visible on entry/front of classroom) □ Decorations including student work are inclusive of all students □ Decorations including student work include different types of works □ Decorations including student work are free of value judgements	□ Students are fixed in rows □ Part of lesson □ Most of lesson □ Assigned seating □ Not assigned seating □ Students are arranged in groups □ Part of lesson □ Most of lesson □ Assigned seating □ Not assigned seating □ Homogenous groups □ Heterogeneous groups
Comments		

Atmosphere		
4. Positive Peer-to-Peer Engagement	**5. Personal Connections**	**6. Honoring Students' Experiences**
The teacher facilitates positive peer-to-peer engagement.	**The teacher engages students on a personal level.**	**The teacher honors student experiences.**

□ Students do not have opportunities to engage in discussion
 	
□ Students have opportunities to engage in discussion only with the teacher
 	
Students have opportunity to engage each other
   □ In small groups
   □ In large groups
 	
Students capitalize on opportunities to engage each other
   □ In small groups
   □ In large groups
	□ The teacher address students by name
	
	□ The teacher makes personal connections with students
	
	□ The teacher inquiries about non-academic issues
	
	□ The teacher makes explicit connections between learning materials and students' lives
		□ The teacher validates students' emotions
		
		□ The teacher encourages students to express identities, points of view, opinion, and experiences in class work.
		
		□ The teacher demonstrates appreciation of student contributions to the class.
		
		□ The teacher uses inclusive language

Comments		

Materials	
7. Depictions of Historically Marginalized Groups	**8. Connection to Social Issues**
Instructional materials depict historically marginalized groups while avoiding stereotypes.	**Instructional materials connect to contemporary social issues.**

□ No depictions of historically marginalized groups present in materials
 	
□ Materials include stereotypical depictions of historically marginalized groups.
 	
□ Materials include non-stereotypical depictions of:
 	
  □ racial/ethnic minorities
 	
  □ gender identity minorities
 	
  □ sexual identity minorities
 	
  □ ability minorities
 	
  □ other cultural dimensions
	□ Materials connect to the broader social context
	
	□ Materials critically engage community challenges and issues.
	
	□ Materials stimulate student-directed inquiry

Comments	

Instruction		
9. Student-directed Inquiry	**10. Critical Engagement**	**11. High Academic Standard**
The teacher facilitates student-directed inquiry.	**The teacher facilitates critical engagement with materials.**	**The teacher holds all students to a high standard.**
□ Teacher predominantly lectures □ Teacher uses demonstrations □ Teacher uses verification activities (answers can easily be adjudicated as correct or incorrect) □ Teacher uses problem-based activities 　□ Part of the time 　□ Most of the time	Students use the materials to make: 　□ text-to-text connections 　□ text-to-self connections 　□ text-to-world connections □ Students analyze prevailing, dominate culture interpretations of texts □ Students produce alternative interpretations of the texts □ Students defend alternative interpretations of the texts	□ The teacher provides detailed feedback The teacher highlights 　□ Areas of excellence 　□ Opportunities for growth □ Feedback is equitably distributed according to the needs of the students
Comments		

Rubric:

Attribute	Not present	Minimally Present	Somewhat Present	Present	Developed
Environment					
1. Classroom Decorations	1	2	3	4	5
2. Student Work	1	2	3	4	5
3. Classroom Arrangement	1	2	3	4	5
Overall Rating: Environment					
Atmosphere					
4. Peer-to-Peer Engagement	1	2	3	4	5
5. Personal Connections	1	2	3	4	5
6. Honoring Students' Experiences	1	2	3	4	5
Overall Rating: Atmosphere					
Curriculum					
7. Depictions of Historically Marginalized Groups	1	2	3	4	5
8. Connection to Social Issues	1	2	3	4	5
Overall Rating: Curriculum					
Instruction					
9. Student-directed Inquiry	1	2	3	4	5
10. Critical Engagement	1	2	3	4	5
11. High Academic Standard	1	2	3	4	5
Overall Rating: Instruction					
Total Rating					

How to Use the TSJFA

It order to insure uniform implementation of the TSJFA, it is imperative that all scores follow a strict set of procedures. Doing so insures that the quality of the feedback even and accurate between scores. The following section is divided into three sections: pre-observation, observation, and post-observation.

Pre-observation

Observations are scheduled in 1-hour increments. However; in reality the scores' engagement will likely be at least an hour-and-a-half. A significant part of this additional time is allocated to **Pre-observation,** or the scores obligation before the observation begins.

In order to insure that we are respectful of the teacher's time, it is imperative that the researcher is ready to begin the observation at the scheduled time. Therefore, it is suggested that the research get to the school at least **20 minutes before** the scheduled observation.

Once in the school, the researcher will need to sign-in with the main office. It is suggested that you introduce yourself as follows:

"Hello, my name is _____, and I'm a researcher from the University of Oregon. I'm scheduled to meet and observe [TEACHER] *at* [TIME]."

You should be provided or ask for directions to the correct classroom. Ideally, you should have ample time and arrive at the classroom 10-15 minutes before the scheduled observation. However, this additional time will ensure you are on time for your scheduled observation.

Once you arrive in the classroom, you should nock on the door (whether open or not) and wait to be invited into the space. Once inside, you should deliver both the IRB Consent Forms and Thank-you Card (which contains a cash stipend as a token of our graduated). Participants will have been email the IRB Consent Forms and should have already had all questions answered; however, please allow the participant as much time as they in order to pursue the document and sign.

YOU CANNOT COLLECT DATA UNTIL THE PARTICIPANT HAS SIGNED THE IRB CONCENT FORM.

After the document has been signed, please give the Thank-you Card to the participant. Ideally, this should be approximately when the scheduled observation time starts. If it is no within 5-minutes, use this time to purpose the Attributes and scoring procedures. **DO NOT START YOUR OBSERVATION UNTIL WITHIN 5 MINUTES OF THE SCHEDULED START.**

Observation

Over the course of 1-hour, you will need to collect evidence to support a determination as to the degree to which the participant demonstrates the assessed social justice teaching behaviors in their classroom. In order to do so with constancy, you will need to follow a specific procedure.

At the start of the observation time, please note the specific topic being address on **Page 1** of the assessment under **Observational Notes**. This section of the scoring Attribute is for you to use and should include all notes which you may find helpful in contextualizing

the classroom, but not pertain to any of the specific Attributes. You should keep this page handy and write notes liberally.

After noting the general topics of discussion, the first task you should evaluate is the **Learning Environment**. Identify and evaluate the **Classroom Decorations, Student Work**, and **Classroom Arrangement.** Use the provided checklist (TSJFA p. 2) to note the presence or absence of specific attributes which will be evaluated. In the Comments sections, provide a brief description of the various **Classroom Environment** attributes, including their placement. Feel free to use visual drawings if it would help provide context for the elements of the **Classroom Environment.**

After noting the attributes of the **Classroom Environment**, please identify the curricular **Materials** which are used. Remember, **Materials** refers to any learning devise used in service of a specific learning objective or lesson, and may include textbooks, handouts, manipulables, worksheets, PowerPoints, and/or other items. Next, use the provided checklist to note the presence or absence of specific attributes of the **Materials** which will be evaluated. In the comments box, provide a brief note about each of the **Materials** and any other information which will help you.

For both **Classroom Atmosphere** and **Instruction**, please follow the checklists throughout the lesson and mark the presence or absence of the various assessed markers. In the comments section, please include detailed notes about specific positive or negative examples which might help you in the evaluation.

Although evaluating both the **Classroom Environment** and **Materials** is a straightforward task, it can also be an over-engaging task. It is imperative that you accurately capture these attributes of the classroom; however, your engagement with these two domains cannot come at the expense of accurately and fairly evaluating the **Classroom Atmosphere** and **Instruction.** Therefore, please be sure to redirect your attention to the instruction and interactions which are happening around you. In some situations, it may be necessary to forgo starting the assessment with an evaluation of the **Classroom Decorations** in order to insure you do not miss important interactions, such as the start of the lesson or transitions.

During the last 10 minutes of the lesson, you should have collected enough evidence to have sufficient information to make a fair appraisal of the lesson. Using this handbook as a guide, take your notes and recollection of the lesson and do an initial evaluation of each attribute, selecting the general range for each item. After you have selected a general range, identify attributes for which you are confident in assigning a score and do so on the final page of the assessment. For attributes which you are uncertain about, review both this handbook and your notes and checklists. If you are still having difficulty in making a final determination, make your best estimate of which level the lesson is. Include a note on your Attribute regarding your uncertainty to aid in the refinement of supporting materials.

Post-observation

After the hour has ended, find the best opportunity to thank the participant and exit without disturbing the class. Once outside the classroom, please review the Attribute and insure that you have completely evaluated the lesson. Place the completed evaluation into an envelope and store in a secure location. All completed evaluations need to be returned to Matt Graham as soon as possible.

Notes

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