CRITICAL QUESTIONS IN EDUCATION

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Colleagues and Friends of the Academy:

It may be inappropriate to wax political in such a venue as this; suffice it to say, we have for the last couple of months been waking up wondering if this year's election outcome is maybe just a dream. Alas, it is not. This brave new political era certainly brings questions—questions for educational policy specifically and questions about the state of our democracy more generally. If nothing else, it will certainly be an interesting ride.

Fortunately, the Academy has a partial cure: New Orleans in March! Academy Director, Steve Jones, is putting the finishing touches on what he says will be our biggest conference to date including a return visit from educational philosopher Nel Noddings. We are very excited to have Nel back and especially so on the heels of her latest book co-written with Laurie Brooks (who will also be joining us in New Orleans). We hope to see you there. Conference information and registration can be found at our web site.

We have noted in past issues how serendipitously articles have come together under common themes. This issue has more of a cornucopia feel to it—a cornucopia of interesting ideas. Our first article by Gabriel Serna and Rebecca Woulf consists of an older journey in a contemporary context: social reproduction theory applied to college access. This review of social production theory in light of the contemporary college context raises important issues of concern as we continue to beat the everyone-must-go-to-college drum. Our second piece dovetails nicely from the first: an examination of attitudes and aptitudes toward math among latino/a students. James Martinez's quantitative study and ensuing suggestions provide much food for thought as we endeavor to make schools successful for all students.

Our third article takes quite a departure from the first two. Anna Soter and Sean Connors lay out their theory of "Language as a Field of Energy." Soter and Connors' argument is not without its detractors and we very much look forward to reader reactions to it. We end this issue's regular manuscripts with a return to a matter near and dear to our hearts: readying teachers to deal with our embarrassing levels of student homelessness and housing instability. Karla Morstad-Smart, Sara Triggs, and Teri Langlie describe the ways in which they work with preservice teachers on the issue of homelessness in their social foundations course at Concordia College in Moorhead Minnesota.

We close Volume 8, Issue 1 of CQIE with two book reviews: Leslee Grey reviews essayist Jarrett Neal's collection, *What Color is Your Hoodie: Essays on Black Gay Identity* and Burk Scarbrough reviews *Elite Schools: Multiple Geographies of Privilege* edited by Aaron Koh and Jane Kenway.

As always, happy reading!

PAX,

Eric C. Sheffield, Managing Editor   Jessica A. Heybach, Associate Editor

Critical Questions in Education

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Reviews

Social Reproduction and College Access: Current Evidence, Context, and Potential Alternatives

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Abstract

>*Social reproduction theory identifies schooling as a primary means for the perpetuation of the dominant class's ideologies, values, and power. The ability to access college is so closely tied to these constructs that it contributes to this dominance and marginalization. Social stratification is not only mirrored in higher education, but the exclusion of individuals from lower income families and people of color fosters oppression within educational environments. Through a review of recent research and evidence, we highlight the factors contributing to the attainment gap, the question of how social class and stratification influence college access and choice, and resultant associated personal and social costs. We find that current pedagogical practices, high-stakes testing, student and family expectations, and historical oppression all contribute to a lower level of college access and limited choices for lower socioeconomically situated students and students of color. We also find that the costs to society remain numerous and substantial and can manifest themselves as limited inclusion of non-dominant groups in higher education.*

Keywords: higher education, socio-economic status and race, college access and choice, social reproduction theory, inclusion

The promise of social mobility has been a longstanding source of pride for Americans (Karabel & Astin 1975). Undoubtedly, this has served as a powerful foundation supporting notions and promises regarding the "American Dream." Education has served as the basis of that promise, and is often considered a panacea for reducing social stratification (Muller & Schiller 2000). The U.S. education system of the 21st century, however, does not necessarily inspire the same pride held so dearly about the American Dream. The current system, once thought to support equality and equity, instead remains a perpetrator of class stratification (Bourdieu & Passeron 1990; Karl & Katz, 1987; McDonough 1997); and has amplified social disparities as traditional notions of merit remain the hallmark of college admissions offices (Hossler 2004; Park & Hossler 2015). In fact, the likelihood that high school graduates will go to college declines as family income drops (Baum 2001; Perna 2006; Serna & Birnbaum 2014; Serna 2015).

What is more, traditional measures of merit are so closely tied to familial wealth that it is easy to argue that these metrics are instead capturing a family's financial standing rather than a student's academic ability. Extensive research on college access provides clear evidence—college choices available to students are not equal when they come from disadvantaged families. The lack

of class stratification that was once a point of pride has diminished, and America continues to face a "stratification of higher education opportunities" (McDonough 1997, 1). The factors contributing to this stratification are complex, relating to socioeconomic status, a student's secondary school experiences, and student as well as family attitudes and expectations (Hearn 1984; Hossler 2004; McDonough 1997; 2004; Park & Hossler 2015; Thomas, Alexander & Eckland 1979).

In this review essay, we employ social reproduction theory (SRT) as a lens to answer the following research questions:

> How does social stratification influence college access in the current context?
> What are some of the associated personal costs of social reproduction in the current context?
> What are some of the associated social costs of social reproduction in the current context?

The three interrelated research questions will help us more carefully frame the analysis and answer these questions while accounting for current conditions in higher education. We hope to stimulate further critical analysis on the topic from a social reproduction perspective. In approaching college choice and access from this lens, a primary motivation is to once again highlight the role higher education plays in retaining and reinforcing power and class structures. In so doing, practitioners, decisions-makers, and researchers can, hopefully, approach the topic from multiple perspectives, and perhaps seek to reexamine their own thinking on the topic and how they might challenge the norms associated with power and class in college access and choice; as well as the embedded assumptions that make up practices, policies, and research.

Social Reproduction Theory (SRT) in Education

Pierre Bourdieu defined social reproduction as a theoretical framework to analyze the role of schools or other social sites in the perpetuation of dominant cultures (Giroux 1983). As a theory of the oppressed, Bourdieu uses social capital theory to define three forms of capital—economic, symbolic, and cultural—that influence how the lower classes are oppressed and how the upper classes continue to thrive, thereby reproducing existing class structures (Bourdieu 1986). In an application of Bourdieu's theory to higher education, St. John and Paulsen (2001) define economic capital as the financial means of a social class; symbolic capital or social status, as represented by status symbols such as a high professional position in society; and cultural capital as the ability for a class to transmit its values and influence.

Bourdieu and Passeron (1990) provide a rather compelling logic for the theory of SRT and its corresponding narrative to delve deeper into the direct relationship between its philosophical positioning and the nature and structure of society. And while it is beyond the scope of this analysis to restate every proposition, as outlined, it allows Bourdieu and Passeron to provide several rationales supporting the premise that schools and pedagogy serve as a primary means for perpetuating class stratification. One example is related to examination as well as the use of academic language.

In SRT, an examination is generally used to exert social power over students from disadvantaged backgrounds, in addition to excluding students from lower classes from pursuing or being successful in higher education. In excluding these students, a certain type of social capital is held

to retain value and social currency. Additionally, lower social status students tend to "self-eliminate" by choosing to not enroll in college after scoring low on admissions tests or failing academic work that so readily informs the admissions process on many campuses.

> Indeed, one begins to suspect that the functions of the examination are not reducible to the services it performs for the institution, still less to the satisfactions it gives the teaching staff, as soon as one observes that most of those excluded from studying at the various levels of education eliminate themselves before being examined, and the proportion of those whose elimination is thus masked by the selection overtly carried out differs according to social class. (Bourdieu & Passeron 1990, 153)

This notion is supported by Hoxby and Avery (2013), who note that most low-income, highly productive individuals do not apply to selective colleges and universities. Additionally, one is hard pressed not to see that the examination and academic work in general, legitimize a set body of knowledge, which is conceived of and introduced through pedagogy developed and delivered by the dominant class (Au 2008). When viewed through Bourdieu's cultural capital lens, this legitimized content has the effect of "marginalizing or disconfirming other kinds of knowledge, particularly knowledge important to feminists, the working class, and minority groups" (Giroux 1983, 268). Students from high social classes are socialized within the family unit with the language of academics. Bourdieu and Passeron (1990, 73) refer to "linguistic capital" and "ability for language" to not only provide the means for students to feel comfortable within an academic environment, but language "provides us with tools to categorize and manipulate complex ideas." When students fail, they tend to leave the system; and thus, the educational system preserves and reinforces the division between the classes.

The educational system in the U.S. and in particular the higher education system, clearly privileges certain groups over others (Serna 2015). These groups tend to be rather homogenous in terms of social capital and background. In other words, college campuses tend to be made up largely of individuals who can access the structures so closely aligned with cultural, economic, and linguistic capital. It is these same power structures that arguably help some students feel much more at home on campus than others.

> The real success of a particular class's push for societal predominance occurs when it uses its political, moral, and intellectual leadership to articulate a basic world view that subordinate classes come to adopt. This world view becomes…the "common sense" of the society. It is accepted as universal and natural, as something of a given, together with the unequal class rule that it legitimates. (Karl & Katz 1987, 4)

The intellectual leadership of American universities perpetuates dominant class beliefs, values, and structures.

College access is one of the most influential and instrumental tools available to society for providing individuals with opportunity. McDonough (1997) defines opportunity as the: "prospect for mobility from the individual's present position to higher- and lower-level positions" (2). However, a significant impediment to college access arises when certain groups of students are unable to access higher education in an implicit, but nonetheless systematic, way. Indeed, SRT suggests that the system of schooling perpetuates the position of the dominant class within a society (Bourdieu & Passeron 1990; Giroux 1983) and this has arguably manifested itself in a very explicit way

on college campuses. While this approach is not necessarily novel (see McDonough 1997; Paulsen & St. John 2002; Perna 2006), it does provide a rather well-suited lens for examining current conditions facing higher education. Namely, that there are significant and systemically driven differences between certain groups when accessing and choosing a college (Hoxby & Avery 2013).

Taken at face value, SRT identifies schooling as a perpetrator of class division and power hierarchies created by a capitalistic culture, and serves only to maintain the values and ideals of wealth and a class-based society. Gewirtz and Cribb (2003) propose SRT has evolved as a theory, moving from a post-positivist influence to a post-structural form. This newer approach seeks to "unpack" SRT and use it to analyze the relationship of schools and class. It can provide a lens to explore how schools and, in this case, higher education, perpetuate the social structures of the dominant class through the situational nature of education. Students are defined with a broad brush; they "are defined not only in relation to class divisions but in relation to a wider range of intersecting social axes including class, race, gender, sexuality, disability, and ability" (Gewirtz & Crib 2003, 244). Under this new definition of social reproduction, schools and institutions can serve a variety of purposes. That the attainment gap at all levels remains steady, and in some cases is rising, indicates that education still serves as an oppressive means; but there are also instances where schools can become an instrument for social justice. In other words, that these structures are in place is clear, that they must remain in place is not. Indeed, our aim in this section was to highlight the inequities raised by dominant power structures. It should inspire those associated with higher education to rethink and reflect on how these practices and ideas are perpetuated daily and to challenge them to foster a more democratic and socially just society.

Barriers

A hallmark of the discussion of education, social reproduction, and cultural capital has been the American family and how it influences, erects or lowers barriers, and enhances or impedes social mobility. Perna (2006) suggests that structural barriers, those elements that oppress and prevent students from accessing higher education, are ascribed to the family and include race/ethnicity, socio-economic status, and social class. Similarly, Serna (2015) underscores the role played by socio-economic status, and insider identities when speaking to college access, persistence, and retention. In this section we outline some of the primary factors associated with social capital theory and how they relate directly to the current context of higher education.

Social Class

Notions of the dominant class are repeatedly referenced throughout the work of Bourdieu and Passeron (1990). They note that: "education tends to reproduce the system of culture of the social formation contributing to the reproduction of the power relations that put that culture into its dominant position" (39). In the United States the dominant class remains primarily white, male, heterosexual, and wealthy. In fact, much of the research on college access indicates that students from the dominant class are much more likely to complete a college degree, and thereby reinforce their position (Au 2008; Paulsen & St. John 2002); this is especially the case since traditional notions of merit and ability undergird the current system (Hossler 2004; Serna 2015). Not only do more students from dominant class backgrounds attend college, they tend to attend more selective institutions. Conversely, when low-income, underrepresented students with high ability apply or

attend, they are more likely to attend a less selective college than their counterparts from the dominant group (Hoxby & Avery 2013).

Looking at social class structure through the lens of SRT, there is an unmistakable power hierarchy present in the classroom that extends to the discussion of access and choice, and is exasperated with a rather limited perspective of "merit." Even as colleges and universities have sought to expand participation and retention of diverse students, research shows that efforts have seen only limited success (Avery, Howell, & Page 2014; Bettinger et al. 2012: Park & Hossler 2015; McPherson & Schapiro 1999; Serna 2015). Paulsen and St. John (2002) share a substantial volume of research that theoretically and empirically demonstrates how schooling reinforces the dominant class structure resulting in marginalization of students from non-dominant backgrounds.

Teachers, who are also traditionally from the dominant class, implement national tests (Au 2008), use language and linguist structures (Au 2006; Bourdieu & Passeron 1990), and call upon social networks (Au 2006; 2008) that are part of a dominant student's habitus. These advantages come naturally and with very little effort to those who are a part of the dominant class (Paulsen & St. John 2002). Referred to as cultural capital, this set of attributes plays a significant role in maintaining a stratified social class system (Perna 2006) in addition to maintaining power structures. In higher education, this idea is clearly expounded upon by Giroux (1983), who defines cultural capital as social characteristics that "come naturally" to the dominant class (manners, language, personal networks) but must be learned by lower classes. In a related vein, McDonough (1997) suggests that cultural capital may provide students with access to resources that promote college-related advantages, and states, "the most stubborn barriers to parity in entrance to college, are in social class background" (5).

Furthermore, the current system of higher education relies on an authoritative model for advancing and delivering knowledge. There is a strong reliance on experts to share their knowledge with students, and then these same experts determine success by providing students with a rating (grade). Dominant class families have done an excellent job of preparing each successive generation to navigate this system well, to do so under these conditions, and in such an environment. The current model contradicts the social and cultural norms of marginalized, and often more relational communities or groups. As an alternative, this model could do more to incorporate more relationship-based education. If the current system is to become inclusive, it must account for the relational nature of cultures such as Black and Hispanic communities (Delgado-Gaitan 1992). Creating learning environments that reflect these values would provide educational structures that are more familiar and inclusive. By providing a learning construct that supports values other than those of the dominant culture, it is possible to create a model where many can be successful.

Socio-Economic Status

In addition to holding the social and cultural capital resources, the dominant class also holds a great deal of wealth. Studies show that low income is significantly correlated to lower success rates than any other factor (DesJardins, Ahlburg, & McCall 2006; Lee 2002; Paulsen & St. John 2002; Tinto 1975). Respectively, SRT suggests the current income level of a student's family is the primary indicator for the individual's future income and economic stability. Where social class influences values, culture, and behavior (symbolic and cultural capital), socio-economic status dictates financial resources (economic capital) available to individuals (St. John &

Paulsen 2001). This reproduction of family wealth, and intergenerational wealth transfers are often attributed to the achievement gap in education (Korn 2015; Lee 2002).

The achievement gap continues to widen between individuals who come from families with fewer socioeconomic resources (Lee 2002). Lee's (2002) empirical study indicates that for populations from low-income families, the achievement gap mirrors the income gap. Not only do students from low-income families earn less over the course of their lifetimes, they also find themselves less able to generate wealth for future generations. For example, 88 percent of the wealthy investor households in the U.S. are white, and only 3 percent are Black and Hispanic (Ladson-Billings 2006). And while some progress has been made in terms of underrepresented students participating in higher education, a 2012 report from the National Center for Education Statistics (NCES) provides evidence that persistence and access gaps remain (Ross, et al. 2012). Moreover, recent data from the NCES/Integrated Postsecondary Education Data System (IPEDS) shows that for Black and Hispanic students, the total percentage enrolled in postsecondary education hovered around 15 percent and 16 percent respectively, while the number of white students was just above 59 percent (2015). In other words, the wealth and education gaps, while somewhat different, nonetheless appear to mirror one another in quite obvious ways.

Given that these trends guide a great deal of the discourse around higher education policy, research, and practice, economic capital as a component of Bourdieu's SRT provides a strong theoretical perspective for understanding what is an evident, ongoing, and widening concern surrounding the gap in income between the dominant class and lower classes (Bourdieu & Passeron 1990). Schooling, like other social structures, reproduces social class via the allocation of resources, which in turn relies upon research, practice, and policy.

The research, practice, and policy guiding resource allocation are also closely connected to paying for college. In the United States, policies have shifted aid toward student loans and away from grants as the primary means for supporting low-income students (Nora & Horvath 1989; Paulsen & St. John 2002; Serna 2015). Additionally, institutions are caught in a difficult situation when trying to balance expectations around merit that maintain social currency and also contribute to social reproduction. Hossler (2004) outlines the manner in which traditional measures of ability, net revenue generation, and diversity can work at cross-purposes. In practice, institutions have shifted significant resources toward merit aid, which has arguably shifted resources away from those from the neediest families. That this inequity carries over to the college access discussion is clearly underscored by McDonough (1997, 142) who found significant differences in how families planned to pay for college. For high socioeconomically classified families, students did not have to consider finances; they knew their parents would "pay for everything." Students from low socioeconomically situated families, however, were highly conscious of the financial component, and made comments about living at home to save money and continuing to work while in college. Baum (2001) presents evidence that financial constraints are a significant barrier for low-income students: "The income-based gap in enrollment rates is even more disturbing because it has increased over time" (51). Taken together with social class, socioeconomic status clearly plays a role in the implicit, but powerful, calculus that students undertake when considering whether or not to attend college and where to attend (Paulsen 2001a). Viewed through a social reproduction lens, what is clear is that the social capital so readily available to those from dominant groups clearly privileges them when accessing higher education, which further enhances reproductive mechanisms.

Race

Research indicates people of color are overrepresented in low-income families. According to statistics from the U.S. Census Bureau compiled by the Institute for Research on Poverty at the University of Wisconsin-Madison, as of 2012, 27.2 percent of Black and 25.6 percent of Hispanic individuals lived below the poverty threshold as compared to only 9.7 percent of Non-Hispanic Whites. This fact should come as no surprise when viewed through a social reproduction lens. The dominant class is white and therefore those who are not white are disadvantaged in our education system (Ladson-Billings 2006), particularly when one takes into account the role of socioeconomic status and adds to it the close correlation it shares with race. In her research on the achievement gap, Ladson-Billings (2006) draws a picture of the history of education in the United States. She illustrates repeatedly how social reproduction frames the U.S. education system for people of color. African American slaves and early-emancipated slaves were forbidden to seek education. Native American Indian youth were forced to assimilate into white schools and found themselves unable to "fit comfortably into reservation life or the stratified mainstream" (5). And, there have been disparities in education for Latina/o students throughout the history of U.S. as evidenced by the Lemon Grove Incident, where the Superior Court of San Diego County ruled the segregation of Mexican and Mexican American students was in violation of state laws (Alvarez 1986). Ladson-Billings (2006) suggests the "education debt" created from decades of opportunity loss for non-white students cannot be repaid overnight, and shares a quote from Robinson (2000) regarding the gap between the races, "no nation can enslave a race…pit them against privileged victimizers, and then reasonably expect the gap between the heirs of the two groups to narrow. Lines, begun parallel and left alone, can never touch" (74). As noted previously, recent data from the NCES shows that a gap remains. What is more troubling however, is that this gap, once almost closed in the 1980s, has crept back to levels unseen since the 1960s (Perna 2006).

In closing this section, it is important to revisit the fact that the discussion around social class, socioeconomic status, and race all remain salient and highly researched topics. What this likely indicates is that little has changed for those from non-dominant backgrounds. This could also provide evidence that the role played by the intersections of policy, practice, and research which include college counselors, admissions offices, high-stakes testing, research, and aid policy have not necessarily formed a cohesive relationship so as to affect change in a comprehensive manner. Perhaps by revisiting these discussions with a critical eye toward social reproduction and its underlying effects and factors, a better, more far-reaching discourse can occur around college access and its relationship to dominant and non-dominant group relationships. Next, we turn to a discussion of SRT and how it relates to college access in terms of values, expectations, and examinations.

College Access and Choice

In the process of "screening out" students from the non-dominant class, Bourdieu (1986) notes there are individual student characteristics that contribute to the attainment gap related to the factors cited in the previous section. In the college choice literature these characteristics are often attributed to the social elements of individual life instilled by families, promoted in secondary schools, and perpetuated through peer effects (Alvarado & López-Turley 2012; Byndloss et al.

2015; Fryar & Hawes 2012; Hossler, Braxton, & Coopersmith 1989; McDonough 1997; Perna 2006); these are discussed below.

Values

Bourdieu and Passeron's (1990) work would suggest that the college value system matches that of the dominant culture; and therefore, those with different values are screened out, in support of social reproduction and maintenance of extant power structures. It is in this manner that values are an aspect of the cultural capital within SRT that perpetuates the prevailing social structure. Paulsen and St. John (2002) explore how students respond to financial factors that are consistent or inconsistent with the student's social class, and how these value judgments support a student's decision to attend college. Low-income students are more averse to debt and are more cost-conscious (St. John & Paulsen 2001). Low-income students are more likely to attend public and two-year colleges, less likely to live on campus, may need to work to support family, and expect to complete only a vocational credential or some college (Paulsen & St. John 2002).

McDonough (1997) explains how values affect college choice, "every student filters her college options through the lenses of her academic achievement, her economic circumstances, her field of vision, and her values" (151). The values within families lead to a sense of entitlement (or lack of entitlement) and this environment influences what students perceive as their choices. That high-achieving students from disadvantaged or underrepresented backgrounds tend not to apply to elite institutions (Alvarado & López Turley 2012; Black, Cortes, & Lincove 2015; Fryar & Hawes 2012; Hoxby & Avery 2013), speaks directly to this notion and the potency of dominant narratives. Indeed, Serna (2015) states that within certain social categories, a student's choices, not just around college but on the whole, are decidedly limited by these factors. So powerful are these components of social life that they are highly predictive of an individual's economic well-being.

In this context, policy, practice, and research can intersect to challenge outdated ideals of entitlement, stratification, and values. Through a continued reliance upon metrics that are more closely aligned to dominant social class, socio-economic status, and race, higher education reinforces the values mentioned here. In the development of policy and day-to-day practice, tacit values are held and reproduced. In this realm, research and its accompanying theory is a powerful tool for combating these norms, while influencing policy formulation and implementation as well as the practical components of quotidian tasks that support these structures.

Expectations

Tinto (1975) suggests generational mobility "may be built upon the passing on of family expectations to their children" (100). As it stands, the education system fails low-income students in this regard. The setting of expectations for college access and success, and for setting their sights on elite colleges is severely limited for those from the non-dominant population when certain expectations are normalized. Meraji (2015) writes about the work of economist Caroline Hoxby of Stanford University and her research on "undermatching." Meraji (2015) shares the story of Kristen Hannah Perez, a high school graduate in a small town outside of Dallas. Ms. Perez has a high SAT score, completed several AP courses, and has the extra-curricular resume of a top student in any urban high school. But, when asked about college choice, she and her family never even considered a top-tier school; elite colleges are "out of our league, out of our range" (Meraji 2015, 4).

Multiple studies confirm the impact of expectations, indicating what Paulsen and St. John (2002) call a "disturbing manifestation of class reproduction" (227).

A lack of entitlement, which is related to elitism, may stem from America's deeply entrenched meritocratic values (Karabel & Astin 1975). An elitist mentality among some individuals suggests the greatest resources should go to the brightest students, undeniably the bedrock of the American dream. A problematic situation arises however, when the realities of social reproduction and merit/elitism clash. In this context, students from non-dominant groups, categories, or backgrounds are consistently told that their values do not match the dominant narrative. In fact, even high-achieving students from underrepresented and disadvantaged backgrounds temper their college choices to "safety" schools. Because measures of merit are so closely tied to dominant narratives and values, this often leads non-dominant students to have feelings of unworthiness and low expectations. Unfortunately, "undermatching represents a real loss of opportunity to students and a major loss of talent for the nation" (Byndloss et al. 2015, 6). This quote precisely, and unambiguously, relates the notion of social reproduction and college access to practice and policies that inhibit certain groups from obtaining a college education. It also clearly ties together these aspects to frame them in terms of losses to society and the public good.

Finally, under these same influences, higher education institutions actively send messages regarding values and expectations. The discourse surrounding college going and access is decidedly related to this "relay" of information where institutions reproduce social messages. Higher education institutions are not only part of the social milieu, passively setting expectations; they are now actively marketing to influence student's college choices (Rhoades 2014). This is not necessarily problematic in itself as it provides useful information. However, it is problematic when the information that is shared implicitly devalues certain types of capital and holds up as exemplary the social categories and language of the dominant group to the detriment of non-dominant populations.

High-Stakes Testing

A review of the literature on college access and choice would not be complete without a look at the role of high-stakes testing. Bourdieu and Passeron (1990) invest an entire section of their book to studying the role of the examination. Subsequently, Au (2008) shows that high-stakes testing is clearly related to social reproduction. The findings indicate that these assessments reproduce race- and class-based inequalities. As noted by Au (2008), these tests "operate as a relay in the reproduction of dominant social relations" (639). The tests themselves do not cause social reproduction, but they work as a relay through legitimizing the knowledge, values, and language of the dominant class (Au 2008). In other words, what are often considered to be objective and widely available measures of student ability, serve as a primary and forceful mechanism for retaining and reinforcing the values, attitudes, language, and capital of the dominant group. For example, in a study examining 17 states that had implemented high-stakes testing, Amrein and Berliner (2002) report that these types of examinations negatively affect students from lower socioeconomic backgrounds disproportionately, and typically decrease their attainment rates. This brings the discussion once again to the role of policy and practice.

Thomas et al.'s (1979) early findings align with Amrien and Berliner (2002) and Serna (2015), in suggesting, that the current college admission practice and selection system based on test scores "perpetuates social class and race differences in college attendance" (153). One is also

pressed to ask why such loyalty to these inaccurate and flawed metrics for measuring student ability has maintained such staying power. To be sure, these measures provide a relatively cost-effective and simple process for sorting or screening students. However, it is difficult to see true believers of the American dream disagree with the sentiment that social class, socioeconomic status, or race should determine an individual's success, especially when that person is highly productive. The problem, nonetheless, is that for most students, background is, for better or for worse, highly predictive of future life outcomes—not ability.

Another concern arises around the discourse in higher education where this system and its accompanying reliance upon traditional measures of merit, has only marginally changed access and participation of those from non-white, non-wealthy backgrounds. Of primary concern is the battle to create an education system that values the cultural, linguistic, and economic capital of those from these backgrounds. Surely a positive move in increasing access and valuing non-dominant narratives and capital starts with day-to-day practice. This is further supported and is often enshrined in policy actions enhanced by research employing and taking up a critical stance. Without all of these parts working in tandem, it is unlikely that access to higher education will change in a substantive way.

To avoid some of the difficulties that arise with examinations, another form of pedagogy that may be well suited to a wide range of individuals is the use of competency-based learning practices. In a competency-based learning model, students work to master specific competencies using a variety of learning models that include direct experience, research, and information from experts. Students move through a series of competencies at their own speed. Competency-based learning is a radical shift in education and represents a threat to traditional postsecondary institutions (Voorhees 2001), as has been seen in popular higher education trade publications recently. Within a competency-based education system, we remove the barriers of high-stakes testing and grades. Because these structures have long been relied on in traditional schooling, faculty and administrators typically resist the notion of competency-based learning.

Social and Economic Costs

On the economic spectrum, higher education is considered a quasi-public good. This position suggests that higher education as a whole exhibits characteristics that provide benefit both to society and to the individual.[1] Therefore, there are both personal and social costs associated with a continued and systemic attainment gap. When examined from a private good perspective, there are high associated direct and indirect economic costs of not going to college. Perna (2006) suggests the average lifetime earnings of individuals with bachelor's degrees is 73 times higher than individuals with a high school diploma. Additionally, Baum (2001) so aptly states, "the cost of not going to college has skyrocketed" (47). A college degree is one of the surest paths to the middle class. Bourdieu's SRT supports this view: schooling perpetuates the social structures, narratives, and linguistics of the dominant class. To reach material success, one must use the cultural means at one's disposal. In the case of America, that path is higher education. This is not to suggest that simply accessing higher education is in itself a panacea. Still, by understanding and employing the mechanisms that serve certain populations so well, those from non-dominant backgrounds can access structures that are so clearly in need of change and re-envisioning. In terms of economic outcomes, Vernez, Krop and Rydell (1999) reinforce the idea that higher education should be the great equalizer. They demonstrate that the economic gap, between those who complete college and

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1. For an excellent discussion of this as applied to higher education see Paulsen (2001b).

those who do not, is widening. Several reports (Schneider and Yin 2011; Vernez, Krop, & Rydell 1999; Ladson-Billings 2006) illustrate the difference in earnings between individuals who earn a college degree and those who do not. With this in mind, one could argue that at least two things are occurring from a social reproduction perspective. First, individuals who do not attend college are marginalized in such an effective fashion that their social and cultural capital is easily dismissed. In other words, class stratification is easily maintained and reproduced. This oppression, in turn, stifles economic and social growth, not just for the individual but for society as well. The benefits that would accrue to the individual and society, which in aggregate are significant, are greatly diminished.

Continuing along this line of thinking, college attainment as a public good, means that the increased wages individuals earn by completing a college degree also significantly contribute to the tax base throughout their lives not to mention the empowerment it engenders when they maintain close connections to their local communities. Using IPEDS and wage data, Schneider and Yin (2011) estimate the loss in state and federal income taxes for those students who start college, but then drop out. Analyzing the 2010 cohort of students and basing data on federal and state tax rates, they estimate that $566 million were lost in federal taxes and $164 million lost in state taxes for a single year. In an earlier study, Vernez et al. (1999) concur and determined "the largest relative increase in public revenues occurs between those with some college and college graduates" (30).

There are additional economic advantages when students complete college. Vernez et al. (1999) have shown a significant decline in the need for welfare and the cost of incarceration when larger proportions of the population have a college degree. This study indicates that the investment in welfare per person decreases significantly as educational attainment increases; essentially a positive externality, not captured in individual earnings, from enhancing college access. Looking at these costs through Bourdieu's social reproduction lens, a similar theme emerges with a very similar question: what are the costs for continuing to serve, not only but primarily, the dominant class and neglecting others? Given the evidence regarding the economic incentives this would create, not enabling more students to access college seems counterproductive. For example, Vernez et al.'s (1999) study determined that for every $1 spent on providing a college degree, personal and public benefit amounts to $4.90. These multiplier effects of higher education spending account for the benefits accrued by savings on welfare and corrections, as well as higher wages and income tax revenue.

Still, even with these positive economic indicators, Sullivan et al. (2015) uncovered some startling findings. Their study shows that, even with a college degree, the return on investment is significantly lower for Black and Hispanic students. This is likely due to several factors, including their need to take on greater debt, and their lower level of cultural capital in the job market, education system, and on campuses; the median return for Black and Latina/o families attain from a college degree is $4,846 and $4,191 respectively. These values are compared to a return of $55,869 in wealth that a white family receives from a college degree. Sullivan et al. (2015) note:

> Students of color often confront unsustainable expenses as they pursue higher education, leading to huge debt burdens and lower graduation rates. Black and Latina/o students, with less family wealth than white students are more likely to struggle with higher costs, seek out less expensive schools, work excessive hours, reduce study time to work, and/or take on more student debt. (18)

There is a great irony in this story: education is the path to improved social status and mobility, but it really only works for those families and individuals who are already part of the dominant group structure in some way. Hence, that America is witnessing a widening wealth gap that closely correlates with a person's race and social class is not necessarily surprising. The personal costs for those individuals at the lower end of the socio-economic ladder, with lower levels of social and cultural capital, are significant. Not only do they live in poverty, there is little hope for them to escape when the social system is so clearly aligned to support only certain types of cultural capital and higher education is no exception. It also explains why Perna (2006) finds that financial policies and practices related to the affordability of college "seem to be working in contradiction to intentions to close gaps in college access" (104) and which likely have resulted in less inclusivity across higher education if not other civic and societal institutions.

To be sure, the costs of not supporting college access for all individuals go beyond the economic costs. Wolfe and Haveman (2001) share the following non-financial, and conceivably social marginalization, impacts when there are disparities in educational outcomes:

- Children of less educated individuals are more likely to be less educated
- Health status is lower
- Consumer choices are less efficient
- Fertility choices are less than ideal (e.g. decisions by teenagers and nonmarital childbearing)
- Likelihood for criminal activities increases (2-3)

In addition to these personal costs, there is evidence to indicate that low-income communities are more likely to be excluded from the civic process (Ladson-Billings 2006). Blacks and Hispanics are minimally represented in the legislature, and their voter registration numbers indicate a significant gap in that arena as well.

While we have focused heavily upon the economic costs to individuals and society these are not the only concerns. In terms of social costs not measured simply in economic terms, a reality is that systemic marginalization is in itself an ill. The devaluation, exclusion, or in fact a focus primarily on the economic value of individuals and groups, removes from them an essential part of their humanity—their rights as humans. As Sen (1999) notes, individuals, groups, and societies all deserve access to quality education, healthcare, housing etc., not because they are part of an economic engine but because they are, simply put, humans. The relationships between social capital, SRT, and academic and economic success are a "messy reality" (Field 2005, 78). The tension between educational structures that inhibit and those that support equity is palatable. On one hand we have the clear disenfranchisement of Black and Hispanic students struggling in a higher education environment of 20th century American values; and on the other hand, the opportunity to diminish disparities through renewed support of these students. The ideas noted here arguably capture some of the power behind challenging dominant structures and social reproduction by providing a basis for enhancement of social cohesion, inclusion, and prosperity. In this way, higher education provides a fruitful structure for this to occur. However, this requires that dominant narratives are challenged, non-dominant capital valued, and discourse and policy restructured so that college access is only a step in the path to a more democratic, inclusive society for all.

Conclusion

Through a powerful focus on dominant values a system of higher education designed by and for this group, of primarily white, wealthy individuals has been created and sustained. For the last several decades, policymakers, scholars, and practitioners have been trying to determine the best ways in which to fix the problems of income inequality, educational equity, and social inclusiveness and cohesion by force fitting all individuals into the same mold without deconstructing the values underpinning the design and use of this mold. To be clear, the research evidence shows that it is a mold that works well for the dominant group, but works less well for others.

As higher education moves forward, it is important to look outside traditional methods of education and schooling and attempts at inclusive practice and policy. To address a diverse population, there must be diverse opportunities for learning and diverse measures of merit. With this comes an opportunity to explore how education is funded, understood, discussed, and provided. As noted throughout this review, Bourdieu centers his theory on schools because "schooling" is symbolic for the transmission of wealthy, white American values. "The academically and socioeconomically 'rich' become richer (i.e., attend schools having superior intellectual and material resources) while the academically and socioeconomically 'poor' become poorer" (Hearn 1984, 28). As we move toward addressing the attainment gap, finding a means to address the social and cultural gaps within higher education is equally important as is the notion of a more democratic, inclusive, and equitable society. In considering the interlocking roles played by policy, research, and practice, it is imperative that we not only address college access and choice, but also ensure that concerns around stratification in higher education come to occupy a central position in this discourse.

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Mathematics Attitudes and Achievement of U.S. High School Sophomores Based on Race

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Abstract

What are high school students thinking? The purpose of this study was to examine the degree that psychosocial attitudes affect academic achievement in mathematics for students of different races during secondary schooling. Based on a quantitative methodology, data was gathered from a nationally distributed survey involving over 16,000 student participants under the auspices of the National Center for Education Statistics (NCES). Transcript information was incorporated into the analysis, so student math attitudes and student racial profiles could be correlated to courses taken and grades. Significant differences were found when comparing Latina/o to non- Latina/o students with regard to student self-evaluations of mathematics affinity, appreciation and capacity. Subsequent analyses revealed that Latina/os are significantly less prepared than their non-Latina/o peers in terms of the highest level of math course completed. The implications of this study endorse revisions to student mathematics course placement procedures, as well as mentorship and other promotional programs for underrepresented minority students. The results of this study inform policy makers, administrators, teachers, and other educational advocates whose interests lie in decreasing inequities that exist among students from a diverse range of racial backgrounds.

Keywords: mathematics, equity, achievement, race, policy, curriculum, quantitative

Introduction/Purpose

It has been said that innovation is the lifeblood of 21st century learning. In Vivian Stewart's (2012) book, *A World-Class Education*, she states,

> the old basics are still important, but the new basics will be required, including a deeper understanding of academic content, the ability to apply knowledge to new problems, and a set of strategies to enable students to "learn how to learn," be creative, and take control of their own learning. (p. 141)

In the United States, there are numerous obstacles that either encourage or inhibit students in their preparations for a future where innovative skills are essential for success. It is the premise of this study that individual attitudes about learning affect academic performance for these students.

The purpose of this study was to determine the relationship between the epistemological development and academic performance in mathematics among secondary-level, public school Latina/o students. This was a quantitative study which defined relationships between these factors, and identified potential reasons for any degree of correlation. The research questions for this study were 1) to what degree are psychosocial variables related to academic achievement in mathematics among Latina/o high school sophomores and their non-Latina/o peers?; and, 2) how well do psychosocial attitudes related to mathematics and reported race predict academic achievement for Latina/o and non-Latina/o high school sophomores?

With the current emphasis on secondary-level students to obtain the necessary skills to prepare them for college or career opportunities in the 21st century, researchers and educational practitioners alike have engaged in a continuing effort to better understand barriers to academic success for specific subgroups of students, including secondary-level Latina/os. For the purposes of this study, the term Latina/o refers to individuals who not only identify themselves as having Latin American ancestry, but includes others who identify themselves, informally or formally, as Hispanic. This is important to note, especially considering the use of both terms, many times interchangeably, in the literature used to inform this study.

Additionally, the data used in this study to generate results prompted student self-reports of their own race, based on personal perceptions of racial designations. Recent data reveal that Latina/os as a whole constituted 14 percent of the U.S. domestic population in 2005 and projections estimate that by 2050, citizens of Latina/o origin will comprise 28 percent of the overall U.S. population (Cohn and Passel, 2013). Moreover, by the mid-21st century, school-age Latina/os who are under eighteen years old will comprise seven percent of the overall population, or approximately twenty-nine million youths, which is more than the population of all residents of the state of Texas as of July, 2014 (United States Census Bureau, 2015).

Theoretical Framework

While traditional choices of analytical/theoretical frameworks for studies related to race are, for example, critical race theory and/or social cultural theory, the principal investigator for this study opted to use an epistemological lens to focus on self-efficacy as it relates to academic performance for students of various races. This choice allowed for a broader interpretation of the psychological processes involved, and aligned more precisely with data investigated that revealed how students interpreted their own abilities to access, learn and achieve in the area of mathematics. Epistemology can be broadly defined as "the branch of philosophy which aims at understanding such concepts as memory, certainty, doubt, justification, evidence and knowledge" (Cooper, 1999, p.1). Historically used by qualitative researchers to inspect aspects of self-learning and self-authorship, more recent studies by established researchers substantiate use of quantitative methodologies as a valid measure of epistemological phenomena.

In an article entitled "Preliminary Evidence of the Reliability and Validity of a Quantitative Measure of Self-Authorship" (2010), authors Baxter-Magolda, Creamer and Yue state that a "quantitative measure of (epistemological phenomena) will add to the impetus for practitioners to create educational interventions targeted at promoting self-authored ways of reasoning" (p. 551). More practically, the robust quantitative data used in this study was obtained as a result of students expressing their feelings about self-efficacy in relation to mathematics concepts and practices.

While important, epistemological investigations that focus on the degree to which student attainment of knowledge of mathematics is socially constructed and/or created on "blank slates" are not offered here (due to space limitations) but relate well to this particular area of study.

Methods

This study utilized a quantitative methodology to derive correlations between variables, and described the degrees to which factors are related. The study used data gathered in a national, longitudinal survey gathered under the auspices of the National Center for Education Statistics (NCES), more specifically the Education Longitudinal Study of 2002 (ELS: 2002). The initial phase of the survey, involved a stratified national probability sample of 16,200 students from 1,015 public and private high schools. In 2005, when the student transcript data was released to the NCES by the participants' schools, specific security measures were taken to ensure the confidentiality of this data.

Primarily, variables used in the study related to the degree that the students surveyed felt they could learn mathematics, based on personal perceptions of capacity and personal efficacy, both in and out of the classroom environment. For example, in terms of capacity, students were asked to gauge whether "most people can learn to be good at math" or whether people "have to be born with ability to be good at math." In terms of efficacy, students were asked, among other questions, whether they "can do excellent job on math tests," "can understand difficult math texts," "can understand difficult (concepts presented in) math class," and "can do excellent job on math assignments." To further determine the degree that high school sophomores achieve academically in mathematics, quantitative dependent variables such as course grades and highest course levels completed in this subject area were also included in this investigation.

Other independent variables measured by this study's methodological instrument included student reported race, parents' highest level of education, family socioeconomic status (SES), reported attitudes about mathematics, level of participation in extracurricular activities, number of hours per week students were watching television and computer/video entertainment, and the number of hours per week students surveyed worked outside of the home. Contributive findings for this study were obtained through the use of a number of descriptive and inferential statistical methods including t-tests, cross-tabulations (e.g. Chi-square), and one way analyses of variance (i.e. ANOVA) results of which are provided in the accompanying tables and figures.

Results

As a whole, the statistical analyses revealed significant differences by participants as they related their feelings about personal mathematics attitudes and learning capacities, based on reported race. With regard to statistical analyses that measured student epistemological/self-efficacy feelings, it is clear that the Latina/o students in the study feel very differently than non-Latina/os in terms of their enjoyment of mathematics and their capacity to learn mathematics. Table 1 (next page) shows that Latina/os were different from non-Latina/os on variables related to attitudes about math, responding to questions that assess the participant's feelings that a) most people can learn to be good at math, b) a person has to be born with ability to be good at math, c) math is fun and d) mathematics is important.

Table 1: *Comparison of Survey Responses of Latina/o and non-Latina/o Students Regarding Attitudes about Mathematics and Personal Mathematics Efficacy (n = 1,540 Latina/o partici-pants and n = 10,130 non-Latina/o participants)*

Variable	*M*	*SD*	*t*	*df*	*p*	*d*
Most people can learn to be good at math			-2.787	1167 0	.00 5	-0.1
Latina/os	1.76	1.52 1				
non-Latina/os	1.88	1.53 9				
Have to be born with ability to be good at math			1.055	1167 0	.30 3	.04
Latina/o s	2.61	1.83 7				
non-Latina/os	2.55	1.78 0				
Thinks math is fun			-4.472	1167 0	.00 0	-0.1
Latina/os	2.70	.824				
non-Latina/os	2.80	.842				
Mathematics is important			-3.945	1167 0	.00 0	-0.1
Latina/os	2.29	1.51 2				

Additionally, Table 2 (next page) shows that Latina/os responded differently than non-Latina/os on variables related to student math efficacy, responding to questions that assess the participant's feelings that a) he/she can do excellent job on math tests, b) he/she can understand difficult math texts, c) he/she can understand difficult math classes and d) he/she can do excellent job on math assignments.

Table 2: *Comparison of Survey Responses of Latina/o and non-Latina/o Students Regarding Attitudes about Mathematics and Personal Mathematics Self-Efficacy (n = 1,540 Latina/o participants and n = 10,134 non-Latina/o participants)*

Variable	*M*	*SD*	*t*	*df*	*p*	*d*
Can do excellent job on math tests			-3.606	11670	.001	-0.1
Latina/os	1.96	2.479				
non-Latina/os	2.18	2.250				
Can understand difficult math texts			-3.392	11670	.001	-0.1
Latina/os	1.74	2.592				
non-Latina/os	1.96	2.322				
Can understand difficult math class			-2.709	11670	.007	-0.1
Latina/os	1.48	3.290				
non-Latina/os	1.71	3.026				
Can do excellent job on math assignments			-2.950	11670	.003	-0.2
Latina/os	1.37	3.661				
non-Latina/os	1.65	3.375				

These attitudes may result in a "self-fulfilling prophecy" where Latina/o student attitudes lower motivations to perform well in the subject area and, as a result, these students are subsequently placed in lower level math classes, relative to non-Latina/o students.

With regard to the highest math course taken one semester or more, it was determined that students from different races were differentially prepared in mathematics as a result of the highest mathematics class completed for a semester or more throughout their high school experience. Table 3 shows the Pearson Chi-square results and indicates that a student's observed highest math course is significantly different than expected, based on their reported race. Latina/os and African Americans are much more likely than expected under the null hypothesis to complete at least one semester of a class which is lower level than Whites or Asians. For example, of the nearly 13,000 students surveyed, four thousand and seventeen (or 50.4%) of Whites completed a trigonometry,

pre-calculus, or calculus course in high school, while only six hundred and seventy-seven (or 34.9%) of Latina/os reached that level.

Table 3: *Chi-square Analysis of Prevalence of Highest Mathematics Course Completed among Asians, African Americans, Latina/os, and Whites*

Variable	*n*	Asians	African Americans	Latina/os	Whites	χ^2	*p*
Highest Course Completed						463.43	.000
Pre-algebra, general or consumer math	510	30	60	120	310		
Algebra I	800	50	130	180	440		
Geometry	1670	90	290	340	940		
Algebra II	3800	250	650	630	2270		
Trigonometry, pre-calculus, or calculus	6190	840	660	680	4020		
Totals	12960	1260	1790	1940	7980		

Figure 4 displays the data provided in Table 3 in a graphical representation, illuminating the differences between highest math courses taken for at least one semester for students in the survey of differing reported races.

Figure 4: *Prevalence of Highest Mathematics Course Completed among Asians African Americans, Latina/o s, and Whites (for students who completed at least a semester)*

Student Highest Math Course Taken versus Race
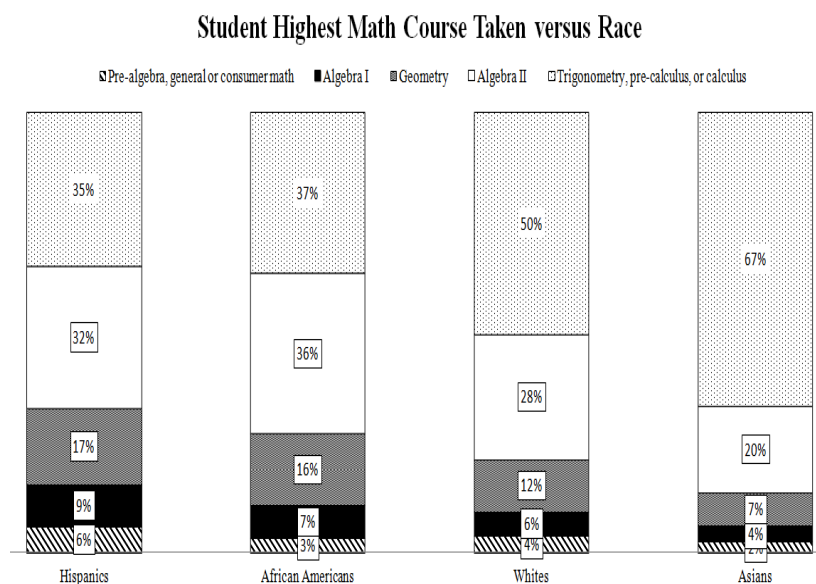
This result, and the knowledge that 84 percent of Latina/o students and 72 percent of Asian students in this study were not "on track" (i.e. they were not enrolled in geometry in their sophomore year), further illuminates discrepancies in course taking by race. It was not within the scope of this study to determine the degree that instructional practices and classroom learning behaviors in lower level mathematics classes are affected by inhibiting Latina/o student attitudes. However, previous studies have made connections in other subjects (e.g. science), where students from diverse backgrounds receive lower quality instruction with less access to inquiry based practices, than their non-URM peers (Lee & Buxton, 2011).

A most intriguing result was obtained from an analysis of variance (ANOVA) test, as seen in Tables 5 and 6, which revealed that transcript grades for Latina/o and African American study participants who had completed geometry in their sophomore year were higher than White and Asian study participants (lower mean, *M*, correlating to a higher transcript grade per convention outlined in Table 6). At first look, this result is counterintuitive until you take into account that more Asian and White study participants are enrolled in higher level classes (than geometry) during their sophomore year and most Latina/o and African American study participants enrolled in lower level classes during their sophomore year.

Table 5: ***One-Way Analysis of Variance (ANOVA) Summary Table Comparing Transcript Grades for Sophomore Participants Taking Geometry in 2001-2002 on Reported Race***

	n	*M*	*SD*	*Std. Error*	95% Confidence Interval for Mean Lower Bound	Upper Bound	Min	Max
Asian	350	6.6171	3.12296	.16813	6.2864	6.9479	1.00	13.00
Black	800	6.5442	3.06275	.10828	6.3316	6.7567	1.00	13.00
Latina/o	310	6.3181	3.05879	.17457	5.9746	6.6617	1.00	13.00
White	3140	6.9054	3.21342	.05735	6.7930	7.0179	1.00	13.00
Total	4590	6.7816	3.17551	.04686	6.6897	6.8734	1.00	13.00

Table 6: *Student Transcript Grades Correlations to F1CGRADE Variable Designation Values for Sophomore Participants Completing Geometry in 2001-2002 (n = 4,590)*

F1CGRADE Value	*Student Grade*	*Transcript*
1		A+
2		A
3		A-
4		B+
5		B
6		B-
7		C+
8		C
9		C-
10		D+
11		D
12		D-
13		F

As a result, Latina/o and African American sophomores in the study who were enrolled in geometry classes (and were considered "on track") may be the highest achieving students within the study's participants for their reported races, and Asian and White sophomores in the study who were enrolled in geometry classes as sophomores included some of the lowest achieving students within the study's participants for their reported races.

Analysis

The results of this study give rise to a number of possible implications in educational theory, practice, and policy. There is evidence that differences in student self-efficacy for students of different races, borne out of a sense of capacity for mathematics learning/achievement, correlate to affinity/enjoyment in the subject for these students. Additionally, the percentage of students that are considered to be "on track" (in this study, taking geometry as a sophomore) vary widely, with disparate differences along race lines.

Latina/o students at the secondary level were differentially less prepared in mathematics than their non-Latina/o peers in terms of the highest level of math course taken in high school. In contrast, when students from the same survey were compared at the same course level (geometry) during the same school year (10th grade), Latina/os obtained significantly higher course grades than their non-Latina/o peers. It should be noted that, due to time limitations, determining the level of academic achievement in more advanced mathematics classes by these Latina/o participants who were enrolled in Geometry as sophomores was not obtained. It could not be determined, therefore, whether student perception of self-efficacy compared favorably with teacher/adminis-trator assumptions about student capacity to perform in higher levels of mathematics.

Curricular Considerations

As of the writing of this dissertation, there are a number of current curricular and instructional changes related to the adoption of the Common Core State Standards for Mathematics (CCSSM) that may alter the contextual landscape for URMs, including Latina/o students. As the majority of the States have adopted these standards, they have also endorsed the use of one or more corresponding instructional strategies that align to these standards. Included in these strategies is an emphasis on open conversational discourse during instructional time in order to heighten critical thinking in the classrooms. Including more student discourse in mathematics classrooms will increase opportunities for Latina/o students with limited English proficiency to participate in relevant classroom discussions, thereby improving their understanding of the material presented. Implementing additional, research-based pedagogical practices with the adoption of the CCSSM has significant potential to increase the scholarship of Latina/o ELLs who "lack the necessary English language skills to comprehend instruction" (Gasbarra & Johnson, 2008, p.2).

Additionally, structural changes are also being recommended to the established curriculum as part of the CCSSM implementation, including the removal of the traditional, hierarchical course sequence (e.g. Algebra 1, Geometry, Algebra 2, etc.) in favor of a series of courses, each of which include a variety of integrated mathematical concepts for students to explore at ever increasing levels (e.g. Integrated Mathematics I, Integrated Mathematics II, Integrated Mathematics III, etc.). The results of this study reveal that Latina/o students in the United States, relative to their non-Latina/o peers, are enrolling in a limited set of mathematics courses during their high school years.

Modifying the curricular landscape as part of the CCSSM adoption provides opportunities for Latina/o and other URM students access to a broader array of mathematical concepts, which may have been beyond their reach previously. These structural changes to the mathematics curriculum has great potential to place ethnic minorities, including English Language Learners (ELLs) and lower socioeconomic (SES) students, in more equitable educational settings (Crisp & Nora, 2012; Nasir et al., 2012).

Conclusions

As a result of both descriptive and inferential statistical analyses, a number of key findings show that, in 2002, there were significant differences in comparing Latina/o to non-Latina/o students with regard to student self-evaluations of mathematics affinity, appreciation and capacity. In terms of implications to practice and policy, educators would do well to recognize the significance of student math attitudes, and how these attitudes might affect academic performance and course placement for students of differing races. Secondary administrators who supervise students who are differentially prepared in mathematics based on race are encouraged to create policies that can "stem the tide." allowing for more equity across race lines.

One practical measure that could assist with this effort would be to create more open course pathways so students could more easily change from their assigned course to another. In the preliminary high school years, this effort may be aided due to differing cognitive emphases of Algebra (computational) and Geometry (spatial). Also, the support of summer school classes for students to advance to higher levels of mathematics will provide the opportunity for URM students to "move tracks," and ultimately allow them access to more advanced levels of instruction. A major limitation in this study is determining the relative degree that administrators, students and parents are involved in course selection of high school mathematics classes across the United States.

Limited anecdotal evidence by the principal investigator of this study, a secondary mathematics teacher with eight years of experience in both public and private settings during the timeframe of the survey used, supports the idea that high school math courses were strictly assigned based on established programmatic pathways (defined by academic performance standards met), monitored by school counselors. Under these conditions, there would be little to no opportunity for administrator, student and/or influence on course placements.

However, school administrators who recognize the self-efficacy aspects related to race and mathematics achievement are encouraged to connect local Latina/o role-models who have achieved success in STEM fields with their students, providing encouragement for these students. Finally, placing instruction at the center of intervention, assigning the more effective math teachers at each site to classes with a higher percentage of Latina/o students, as well as providing effective outside-of-class tutoring programs for these students, has the potential to "level the playing field" for these students. Results of this study show that Latina/o students need both an increase in internal motivation and positive, productive external learning environments to increase the potential for success in mathematics at the secondary level.

There are a number of contextual and methodological implications which bound the generalizability of these results, as well as procedural limitations and delimitations. In recognizing the bounds of this study, both in scope and process, future researchers are encouraged to further explore the relationship between mathematical ways of knowing, race and academic achievement. The results of this study inform all educators whose interests lie in decreasing inequities that exist

among students from a diverse range of racial backgrounds in the United States, as well as increasing Latina/o student attainment of 21st century skills in mathematics.

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Language as a Field of Energy: A Critical Question for Language Pedagogy

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Abstract

This essay offers a reorientation of our views on the interrelationships of language and thought as a field of constantly reprogrammable energy, and provides an argument as to why we believe this new metaphor (i.e., language as a field of energy) matters in language pedagogy, in classrooms at all levels, as well as within teacher education and teacher professional development. We define language as a field of energy in the following way: as language operating as a "region" in which a force (in this case, words and their rhetorical functions) operates to bring about some influence resulting in an effect or having an impact on one's own behaviors, on the behaviors of others, as well as having the capacity to influence emotions, and/or the course of events. Following a brief introduction in which we state our purpose, we present the case for the above argument in the context of current language and literacy education. In doing so, we delineate language-thought-perceived reality relationships through a synthesis of a selective representation of the primary thinkers in mainstream language scholarship, as well as other fields, such as philosophy, social anthropology, linguistics, discourse analysis, and to coin a new field, "linguistic metaphysics." While we focus our discussion on language, we are mindful of its obviously intimate, symbiotic relationship with thought. We conclude with suggestions as to how this concept, "language as a field of energy," can be pursued in educational settings.

Keywords: *language as a field of energy, language pedagogy, language-thought-perceived realities, teacher education, pre-service teachers, professional development, language curriculum*

Introduction

> *Metaphors may create realities for us, especially social realities. A metaphor may thus be a guide for future action. Such actions will, of course, fit the metaphor. This will, in turn, reinforce the power of the metaphor and make experience coherent. In this sense metaphors can be self-fulfilling prophecies. (Lakoff & Johnson, 1980, p. 156)*

In the opening scenes of Goethe's *Faust* (1828), we are introduced to Faust as he struggles with the meaning of the Greek word "Logos," or "Word," as it is used in "The Gospels of St. John. *Am anfang war die Tat*" ("In the beginning was the Deed"). At the literal level, the German word,

"*Tat*," means "deed" or "act;" however, its original Greek source, "*Logos*," also acknowledges its metaphoric intent, as represented in "word," "thought" and "power." Goethe seems to settle on this conflation—"thought," "act," "power," and "word"—as synonymous. *Faust* scholar and literary critic van der Lann (2007) describes this conflation as the "original and quintessential speech act[1]" (p.55). Our decision to highlight Faust's struggle to decide whether there is a relationship between thought as expressed in word and deed might appear to suggest that we are implying a degree of degree of efficacy between word and deed, which we are, though we would add the following: the degree to which word results in deed also influences outcome, whether or not it is intended, or even expected.

If one is to believe in the power of positive thinking, one might be led to accept that habitual thoughts influence deeds and actual outcomes, whether or not one is aware of that relationship. Such an example is offered by the work of scholars in the neurolinguistic programming movement launched by Bandler and Grinder (1975), who argued that "reframing" habitual patterns of language use and replacing them with new patterns can result in concurrent shifts that eliminate patterns of behavior that were either dysfunctional or inhibiting to those who suffered from their debilitating consequences. Others, such as Myss (1996), whose work as a medical intuitive might be questioned by mainstream medical professionals, but whose claims are supported by research on the relationship between mental stress[2] as manifesting in depression and its subsequent effects on the body, may raise eyebrows in disbelief that we still need to be convinced or nod in unison with such a position. That a causal relationship is implied in the word/thought/action relationship is captured in Feldman's (2006) discussion of the role that complex metaphors play in human conceptual development, which he and others, including Lakoff and Johnson (1980), see as a major influence in the shaping of our thinking through the ways in which metaphors name concepts. According to Lakoff and Johnson (1980), metaphors become "bounded concepts," or "containers," which influence how we think about "things" and "experiences" (p.30). Therefore, we argue, the ways in which we habitually think, which are reflected in turn in our habitual uses of language, are so entwined that unless we are made aware of just how habitual these words/thoughts are with our acts/actions, we fall into the trap of believing that what we think, do, and feel are "just the ways we are," and therefore reflect a "reality" that cannot be changed, let alone challenged.

Scholars across a diverse array of fields, including philosophy, semantics, cellular biology, psychology, sociology, and discourse analysis, along with playwrights, poets, and metaphysicists, appear to agree that the relationship between language and what happens (i.e., becomes actualized) is integrally related. Mercer (2000) provides a variety of examples, including marriage vows, as evidence that "saying something amounts to performing it" (p. 11). In the field of psychology, Vygotsky (1962) asserts that a "word is a microcosm of human consciousness" (p. 153). Both

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1. According to Austin (1972), speech acts are distinguished by speakers' intentions as well as social context, and so form alone does not determine a type of speech act. Van der Laan's somewhat euphoric categorization of Faust's use of the word "Tat" to represent an amalgam of thought, word, and act, can only function in this way if we perceive it as an "explicit performative utterance" in which the illocutionary force is prominent.

2. Here we refer to mental stress as manifested in depressive thoughts (i.e., inner talk), as well as in depressive beliefs (e.g., "I can't cope"; "I'm finding this all too hard"; "It doesn't matter" and so on). Inner discourse (chunks of thought expressed in words) is notoriously difficult to document. Similarly, self-report is often notoriously unreliable. Until we can map inner talk into some system that is able to capture it as expressed, we must rely on tools such as self-report. Even talking into a personal recording system will not capture all of our thinking even the verbalized thinking that we all constantly engage in. The challenge is that each of us becomes aware of the pattern that this inner discourse takes—is it fatalistic, is it optimistic, is it guarded, is it open, embracing, and so on. Interviews (both open ended and structured) can attempt to capture such patterns if documented and carefully transcribed. Of course, participants in case studies may or may not confirm that what they actually said is what they actually think.

Dewey (1991/1910) and Vygotsky (1962) believe that "signs give humans the power to regulate and change natural forms of behavior and cognition" (Vygotsky, 1962, p. 153). Quantum physicists (Bohm, 1990, 1993), and Barad (2003, 2007, 2010) provide convincing evidence of the entanglement of all matter, arguing that everything (including thought and language) is reducible to "energy," and hence, interconnected, and, in recent years, neuroscience (Hanson & Mendius, 2009) provides evidence that our bodies and brains negatively and positively register physiological and neurological effects from habitual thoughts, the language that encodes them, and the beliefs, attitudes and emotions in which these are embedded.

These scholars have much in common with healers, mystics, and metaphysicians such as Dyer (2004), Hay (1980), and Holmes (1997/1938) who share similar beliefs about the relationships between thought, language and the lived experiences that we create. Many of us have, at one time or another, asked others not to utter words we suspect are going to be uttered out of concern that doing so might actualize that which we fear. Pinker[3] (2012) writes that "there is a way in which words are tied to reality even more directly. They are not just facts about the world stored in a person's head but are woven into the causal fabric of that world itself" (p. 9). Pennebaker et al. (2003) provide evidence that word use is an indicator of psychological and health change, and they argue that rather than studying peoples' uses of nouns, verbs, and modifiers, we should instead study their use of what they term "particles" (i.e., pronouns, articles, prepositions, conjunctives, and auxiliary verbs) as these have "tremendous social and psychological meaning" (p. 570).

Although this is both an intriguing and compelling claim, space constraints preclude a richer discussion of Pennebaker et al.'s (2003) argument. A brief discussion is, however, warranted about the semantic and pragmatic roles of certain pronouns (e.g., those that function as determiners such as "this/these/that/those"), definite and indefinite articles, prepositions, and conjunctives as subtle shapers of how concepts are perceived and which also "contain" a primary concept. Simply dealing with these "parts of speech" in the standard definitional manner that is typical of grammar instruction in schools ignores their semantic and pragmatic role and power. Prepositions, for example, are primary indicators of space, directionality, location, and duration. Conjunctives connect concepts causally either in terms of equivalence and/or in terms of subordination. They also qualify how content (nouns and verbs in particular) is to be perceived. As prepositions do, conjunctives also indicate relationships between elements, whether as equivalent, superior or subordinate. The auxiliary verbs in English also function, semantically, as full verbs which embody possession ("to have") and states of being ("to be"). Myss (1997) observed during her twenty years of experience as a medical intuitive that the possessing aspect of "having" an illness (e.g., "I have pneumonia") or naming oneself by an illness (e.g., "I am a diabetic") might appear to be commonsense. Yet she argues that in doing so, we "become" the illness, and the illness "becomes" us. She consequently

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3. Pinker (2012) refutes linguistic determinism (Whorf and Sapir and their subsequent supporters) on the grounds that language can't be "too central in our mental functioning" in that "we had to learn it in the first place" (p.148). He provides extensive examples in support of his claims that "human thoughts are stored in memory in a form that is far more abstract than sentences" and that "major memory research" findings indicate that people have "poor memories for the exact sentences that gave them their knowledge" (p.149). Nevertheless, he stops short of totally debunking the culture-shaping-language-thought symbiosis of supporters of linguistic determinism. His critique, however, seems to rely on a focus on form rather than on content (semantics), and in his discussion of metaphor, necessarily focuses on how it is expressed *through* language, At any rate, we do not argue for culturally-specific articulations of thought in this paper—we obviously focus on the language English (and the standard code at that) with which we are most familiar, to articulate how thought and language are forms of energy (regardless of specific cultural variation) and embrace the possibility that other languages may well function within their own communities (large and small) in similar ways because the medium (language) seems to be at least, species specific, regardless of cultural, regional, and social variation.

recommends that people not "claim" or "become" the illness. Instead, we might state that our bodies are "experiencing" diabetes or pneumonia, as this acknowledges these illnesses as external phenomena that are not intertwined with "who" we are or "how" we are.

These may seem to be simplistic explanations, yet as those who use mantras or chants to change inner states of being firmly believe, the words we use are critical in the instantiation of the condition they call forth. If the words are not precise, the chant or utterance will not work or may even have unintended effects. The words we use, then, have the power to bring about transformation, for good as well as for ill. Nevertheless, language pedagogy (what is actually taught in the classroom) has yet to acknowledge this degree of intimacy between thought, utterance, and actualization. "Parts of speech" are generally regarded as relatively minor "structural" elements in English language instruction, but we argue that they warrant further analysis in terms of their semantic and rhetorical roles as evident in the work of mind-body-consciousness practitioners of many different persuasions, expertise, and experience (e.g. Dyer, 2009; Hay, 1984; Johnson, 1987; Myss, 1997), and because they appear to play a potentially significant role in the language/thought/perceived realities nexus. Space constraints in the present article limit the extent to which we can provide deeper discussion of these aspects of the role of grammar, but we will refer to that role in a later section focusing on a discussion of possible applications of our central concept in pedagogical contexts. In the sections that follow, we provide a rationale for considering "language as a field of energy," describe the central concept in greater depth, provide a selective overview of interdisciplinary conceptions of the language/thought/perceived realities nexus, discuss the role of metaphor in creating the realities we live, and explore the potential role of the concept "language as a field of energy" in language pedagogy and in teacher education.

A Rationale

Clarification needs to be made at this point as to whether we are distinguishing between spoken and written language and their relationship to thought, and whether we are confining our discussion to English, or acknowledging all languages as we discuss the language/thought/perceived realities nexus. First, we are concerned with delineating the language/thought/perceived realities nexus in relation to both unconscious and conscious uses of language. With respect to the unconscious uses of language, we naturally refer to spontaneously generated, internally and externally expressed oral language. However, we are also concerned with written language insofar as it has the potential to impact a population at large (e.g., advertising, newspapers, and other widely disseminated written texts). That said, examining all possible genres and considering how the language/thought/energy nexus is manifested through these is beyond the scope of this paper. Broadly speaking, the language we most commonly express and respond to in daily life is what we primarily refer to in our paper.

Second, we confine our discussion to what we know about how the English language functions. While one might consider all languages under the umbrella term "language" as a phenomenon unique to the human species, and as one example of how thought is manifested in action, we must necessarily confine ourselves to considering the language/thought/perceived realities nexus in terms of how we believe it operates in the language with which we are most familiar—namely, what we might loosely term "standard" English language. While psycholinguists (e.g., Altman, 1997; Chomsky, 2000; Hauser, Chomsky, & Fitch, 2002; Scovel, 1998) have been able to identify some commonalities (e.g., concepts such as "naming," "states of being," and "relationships") across languages with which they were familiar, and although anthropologists such as Sapir (1961)

and Whorf (1956) have investigated language as a cultural and social phenomenon, the general agreement seems to be that there are certain innate capacities that influence language production. However, we find ourselves agreeing with Pinker (2012), who argues that assuming widespread portability of words and their grammatical constructions across all languages as representative of thought in all cultures is a problematic pursuit.

In pedagogical contexts, particularly in the English/language arts classroom, educators have typically focused on teaching the structure of standard written American English. In doing so, they have analyzed it according to prescribed grammatical rules, attempted to confine it and control it, and in the process, reduced it to an academic phenomenon that becomes, unfortunately, devoid of the life of its users. Many students have brought a rich personal language to the school setting only to learn that their language or variation is inappropriate in mainstream academic contexts. Instead, the process of containing and constraining the richness of these cultural and individual linguistic heritages is still the rule rather than the exception (Delpit, 1988; Elbow, 1973; Heath, 1983; Rose, 1989). In the process, students not only lose their voice, but also lose their sense of identity as it is intricately embedded in their personal language. Schools and the systems that monitor their performance (for example, regional and national assessment agencies) steadfastly ignore the implications of acknowledging that language and its users are inextricably intertwined and that we can no longer perceive language as something disembodied and separate from individuals who acquire it.

Since the 1970s, English language education and literacy scholars in the US, including the National Council of Teachers of English (NCTE, 1996), have, however, increasingly embraced liberatory approaches to writing, including "empowering students through language," "teaching grammar in context," and foregrounding the relationship between "language and identity" (e.g., Elbow, 1973; Gee, 1998; Noden, 2011; Weaver, 2008). Harmon and Wilson (2006) argue a case for moving "beyond grammar" to considering language as both a source of power as well as a source of dis-empowerment. While this trend is encouraging, it does not challenge the as-yet conventional view of language pedagogy that, although acknowledging the rhetorical role of language, refrains from usurping the status quo regarding how we teach it through continuing to emphasize adherence to standard written variation conventions that govern usage, correct grammatical forms, and mechanics (punctuation and spelling).

Two representative examples of our enduring attachment to conventional language education are Birch's (2005) *Learning and Teaching English Grammar K-12* and Leech, Deuchar and Hoogenraad's (2006) *English Grammar for Today*. Both acknowledge the relationship between language and power, but accept the impact of high stakes standardized testing. Indeed, Leech et al. (2006) argue that language educators have re-embraced the primacy of grammar in language education, following the more libertarian views of the late 1970s through the 1990s. Thus, the primary focus of the field continues to be fixed on students knowing the rules of appropriate language use, albeit in ways that can be tested in standardized ways.[4] We understand the apparent

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4. What was loosely termed the "Back to Basics" movement first emerged as a concept in the late 1970s, began to gain momentum in the 1980s, gathered more steam in the 1990s and lead to Bush's 2002 No Child Left Behind (NCLB) Act. It represented a trend in US federal government intervention at policy and funding levels in response to concerns that the US had fallen behind other leading nations in terms of high school graduation rates and perceived performance levels by graduating US high school students. Increasing government pressure for US public schools to conform to national standards was represented by mandatory standard tests that students must take to graduate (NCLB) and by tying student performance to teacher performance and perceived competence. Student-centered learning as manifested through programs such as the "Whole Language Movement" (Goodman & Goodman, 1981), was increasingly abandoned in the face of federal mandates for standardized performance measurements through standardized

value of such a focus: both of us have long been language arts educators, and both of us know the value of following conventional uses of language in educational settings. However, we find this focus narrow and suggest that it ignores the extraordinary potential in thinking about the language/thought/perceived realities nexus as an avenue for positive change in the increasingly troubled, and confused, world we inhabit.

We also believe that because we have moved into what is now called "the digital age" (Carrington & Luke, 1997; Flood, Heath, & Lapp, 2008), complete with its embracing of "multimodal" literacies (Miller, 2008, p. 441), there is an even more urgent need to understand the role of language in creating the realities we live. The ease of access to, and by, an increasingly larger population of consumers and producers of digital texts makes it all the more imperative that they are conscious of what they are consuming and creating. Miller (2008) observes that the children of the new millennium have "grown up *surrounded and shaped* [our emphasis] by practices related to computers, the Internet, and increasingly sophisticated mobile phones that have multiple functions now expanded to include computing, electronic storage, photography, web surfing, instant messaging, [and] word processing" (p. 441). Yet we have always been surrounded with and shaped by the communicative practices dominant in our communities whatever the era, whatever their media for delivery. What kind of shaping is achieved by the bombardment referred to above, and to what extent can individuals counter effects of such daily direct or indirect exposure on their individual consciousness? We leave that for readers to consider.

The Central Concept: Language as a Field of Energy

We define language as a field of energy in the following way: as language creating a "region" in which a force (in this case, words) operates to bring about some influence on one's own behaviors, on the behaviors of others, on emotions, and/or on some course of events.

As we discuss language and its impact on our personal lives, we will also refer to thought, since the relationships between language, thought, and the construction of the realities we live through our mental constructs are for the most part, although by no means exclusively, articulated through language. Obviously, thought can be manifested through physical manipulation or movement, through non-print visual representation, through aural representation, and kinesthetically. However, the focus in this article is on the thought/language/perceived realities nexus.

Our concept, "language as a field of energy," emerged from influences outside of the usual range of academic scholarship in the social sciences. Among these is the work of a relatively new field, termed "energy psychology" (Lipton, 2005, p. 172). Lipton (2005) and McTaggart (1987,

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tests. Subsequent school and district-based innovations such those that re-emerged in the Obama administration's educational initiative ("Race To the Top," 2009) appear to foster initiatives at state and even district (local) levels but when such initiatives are measured by standardized metrics, we are led to question whether the word "innovation" is not a misnomer at best, misleading at worst. This is the not the paper in which we have the room to discuss the implications of unprecedented federal intervention in public education in the US, but we can argue that unless a state or local initiative reflected the national agenda embodied in the Acts that emerged in 2002 (NCLB) and 2009 (RTT), it was (a) going to have to prove it met the standards embodied in these acts and that it could meet those standards through standardized tests that would measure the effectiveness of such embodiment. That leaves little room for going "beyond" the basics—in this case, to a more open-ended investigative approach to language study. Standardized tests focus on multiple-choice, fixed answer questions. While certain aspects of language study can be tested in this way (e.g., a part of speech is determined in large part by how it functions in any given linguistic utterance), such a minimalist approach does not get at much beyond the basics and does not embrace aspects of language use as they play out in our daily lives. [http://hechingerreport.org/report-1980s-driving-todays-education-reform/]

2007) in particular have attempted to define thought as 'energy'[5] in scientific terms. Metaphysicists such as Holmes (1997/1938), as well as psychology-based healers (e.g., Dyer, 2004, 2009), have also used the term, but in those domains the use of the term "energy" remains loose and vague. A cell biologist by training and an academic in that field for a number of years, Lipton (2005) provides us with that concrete definition, having also used the phrase "energy field" (p. 124) in his discussion of the nature of thought in quantum terms.

To our knowledge, however, no one else has used the phrase "language as a field of energy," and we do so with some trepidation because in order to define that concept, we have to accept that thought itself is a "field of energy." Lipton (2005) argues that as the mind is energy, thought too, is energy. One could conclude, therefore, that while not necessarily identical, thought and language are inextricably entwined. This view, of course, challenges one of the major influences on Western thinking, notably Descartes, who according to Lipton (2005), "dismissed the idea that the mind influences" any form that was not considered matter, and that could not be rationally tested" (p. 125). That position was not challenged until quantum physics (e.g., Barad, 2007; Bohm, 1990; Pagels, 1982) changed how we think about matter at the atomic level. In our understanding, matter is what is formed to become energy made manifest. Lipton (2005) and other quantum physicists argue that at the atomic level, matter does not appear to exist "with any certainty," and "exists only as a tendency to exist" (p. 99). McTaggart (1987) cites scientific research that supports the notion that information (of any kind) is energy materializing as information. She concludes that energy itself can be thought of electromagnetically, sub-atomically, as waves, as something physical and tangible. Lipton (2005) argues that language and thought are manifestations of the interactive nature of the universe itself, and suggests that matter is not something fixed but mutable because of its constant interaction with other energy. A simple way to think of "matter" for our purposes is that "matter" (i.e., material substance) is, according to quantum physicists, "made up of invisible energy" (Lipton, 2005, p. 100). Within a quantum physics frame, thought and language are "energy" in the same way that atoms are energy, given that atoms are non-solid, non-material "force fields" (Lipton, 2005, p. 102). We also draw from quantum physics another key principal which we propose is an essential component of the "language (and thought) as a field of energy" concept: namely, that "intercommunication" operates among all "physical parts (matter)" as well as the energy fields (waves) that make up the whole, the universe itself (Lipton, 2005, p. 102).

Thought, then, as does the language which expresses thought, not only has the capacity to act upon other matter (i.e., material substance), but also acts upon non-material substances that are manifested as waves of energy (such as other thoughts, other intentions, other words, others' words, and so forth). If we accept this line of thinking, then it follows that language, the primary

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5. We agree with Pinker (2007) and others (Lakoff & Johnson, 1980; Feldman, 2008) that all language is, essentially, metaphoric regardless of how "literal" we strive to be in seeking to define it "scientifically." Feldman (2008) captures the multi-layeredness of language in his assertion that "real language is embodied, integrated, and multimodal" (p. 9) and that "this integrated, multi-faceted nature of language is hard to express in traditional theories" (p. 9). However, he stops short of Pinker's (2007) rather bald but (we think) acceptable notion that "language is saturated with implicit metaphors like EVENTS ARE OBJECTS and TIME IS SPACE…Metaphor is so widespread in language that it's hard to find expressions for abstract ideas that are *not* metaphorical" (p. 6). This is so because, essentially, how we articulate (through language) what we conceptualize (think), is through categories that are captured in "the meanings of words in our language because they permeate the way we represent reality in our heads" (p. 3). Thus, it is a given in our paper that while attempts may be made to represent a concept (e.g., "energy") in what seems to be a purely definitional, scientifically "objective way," we are nevertheless defeated, as it were, by the inherently metaphoric nature of how we use language to articulate thought and experience.

vehicle through which thought is expressed, *is* a field of energy. We push that line of reasoning further and suggest that what we habitually, constantly think and utter ultimately brings a "wave" of energy created by those thoughts into contact with matter (i.e., a material substance), resulting in materialization.

If we entertain the possibility that this is a reasonable assertion given the line of reasoning employed, what support can be provided for it? We provide an example drawn from an informal analysis of headlines and subheadings in a major city's daily morning newspaper (below), although we point out that the phenomenon is not unique to the particular newspaper we focused on. The pervasive content of those major headings and subheadings consisted of metaphors (e.g., "Arab leaders blast Bush") that explicitly or implicitly related to violence, weaponry, and assault. In very few examples is the assault literal ("Man convicted of assaulting deputy sheriff"). In others, phenomena not generally perceived of as having intentionality appear to have acquired conscious agency (e.g., "House fire kills man") and in this sense, intentionality.

- Audiotape message seeks to split allies from US, CIA says (main news feature)
- Arab leaders blast Bush endorsement of Israeli plan (main news feature)
- Contractors working under fire (main news feature)
- Redwings put it all together in victory (sports section)
- Recruits' strengths: toughness, shooting (sports section)
- Joe delivers big hit, message to youngsters (sports section)
- Voice-mail hell (Accent—Life front page)
- Man convicted of assaulting deputy sheriff (main news section)
- House fire kills man, son-in-law near Cleveland (main news section)

In the course of identifying and analyzing these headlines and sub-headlines, we found ourselves needing to take mental and physical health breaks from the analysis. On average, 65-70% of headlines and sub-headlines are of the kind illustrated above. Over time, we believe that such language is absorbed into our thinking in ways that influence what Lakoff and Johnson (1980) term "experiential gestalts" which become the "natural dimensions for our direct experience" (p.176). We leave readers to consider how, and to what extent, such language has shaped their own thinking as well as their lived experiences over time.

While mindful that other modes of representation have been (and continue to be) available to us for communicative purposes (e.g., body "language" as well as drawing, photography, dance, sculpture, music, and visual media), we are, in this article, primarily interested in *language—* words and their structures—as the vehicle through which we convey *states of mind, intentionality, and receptivity* [our emphasis]. Again, this places language as a phenomenon that functions as one of many possible channels through which thought is expressed and which, in turn, influences further thought. It is both interactional (Dewey, 1991/1910) and transactional (Britton et al., 1975); it is both acted upon and acts upon; and it is both fluid and fixed (e.g., spoken or written, withdrawn vs. reiterated). As we proceed in this essay, we will focus on several key questions that have been identified as relationships between language and thought within our framework. These include: how are we constructed by our thoughts and language; how can we re-examine relationships between language, thought, and the realities we live; and of what relevance is this reconceptualization of language to education?

**A Selective Overview of Interdisciplinary Conceptions of the
Language-Thought-Perceived Realities Nexus**

How have we arrived at our view of language (and thought as expressed in language) as a field of energy? What influences prompted this evolution in our own thinking about language: what it is, how it relates to thinking, and how both relate to the realities we live? To respond to these questions, we next turn to a necessarily selective discussion of the work of metaphysicians, anthropologists, philosophers, and other scholars who we will refer to in the following analysis. We have included some key constructivist and social-constructivist theorists (e.g., Dewey, 1991/1910; Gee, 1998; Vygotsky, 1962) in this discussion because of their basic argument that we are shaped by the beliefs and practices encoded in language as well as by behaviors that are dominant in our social and cultural contexts. Our discussion of scholarship related to the language, thought, and reality triad is necessarily selective. Each of the disciplines representing these phenomena have accumulated a considerable repository of scholarship and research since the mid-19th century, and in particular, since the post-World War II era. Our intention here is to demonstrate intersections across diverse fields of knowledge—whether acknowledged or not—among language, thought, perceived realities, and lived experience. We also acknowledge that we will have omitted others who would be at least equally relevant.

What came to be regarded as linguistic determinism, or linguistic relativity, concepts largely attributable to Sapir (1949) and his former student, Whorf (1956), fell out of favor in the 1960s and 1970s, and yet many socio-cultural theorists (Eckert, 2000; Gee,1998; Halliday, 1978; Luke, 2000) ascribe similar power to language as did these earlier scholars. Nevertheless, their premise that language "constructs" us through social and cultural reinforcement is remarkably similar to the views about language and its "construction" of the realities we live expressed by contemporary psychologists such as Dyer (2004, 2009) and metaphysical healers such as Hay (1984). In both *The Power of Intention* and *Excuses Be Gone*, two of his relatively recent publications, Dyer (2004, 2009) acknowledges the tenacious and often unconscious role that group thinking and language as manifested in the discourses of families, communities, and cultures play in influencing the thinking and language of individuals.

In her landmark text, *You Can Heal Your Life,* Hay (1984) documented many examples of the pervasive influence of culturally and socially derived beliefs that clients experienced as limiting and yet which exercised a vice-like grip on their perceptions about life. Beliefs about what is possible given social and economic constraints that families have experienced over time, for example, can continue to exert what become inhibiting influences on successive generations even if the social and economic constraints are no longer significant or have been removed, such as occurred after the Great Depression of the 1930s. Examples of how one generation's belief patterns become manifested and repeated in the language of subsequent generations are plentiful, but we share a few of Hay's (1984) examples here for illustrative purposes:

- Related to money: *"*Money doesn't grow on trees; money goes out faster than it comes in" (p.117); "A penny saved is a penny earned; money only comes from hard work" (p.118).
- Related to age: "It's too late to do that (e.g., dance) now" (p.6); "You can't teach an old dog new tricks" (p. 6).
- Related to worth*:* "I'm not good enough" (p.6); "I/you never do anything right" (p. 6).

We see in the above examples, language that expresses thoughts of lack, the inevitability of the effects of chronological aging and, perceptions of self that often (although not always) stem from having heard similar statements through childhood. These are instances of language patterns that many of Hay's (1984) and Dyer's (2004, 2009) clients expressed. Although the examples are related to counseling, they are, in essence, also examples of what Vygotsky (1962) describes when he explains how we are shaped by our contexts, in turn resulting in a lifetime of shaping. According to Vygotsky (1962), "during early childhood, a fusion of language and thinking occurs (i.e., verbal thinking) which…shapes the rest of our mental development for the rest of our lives" (p. 120). Granted, Vygotsky focuses on the intertwined development of language and cognition in early childhood and Dyer (2004, 2009) and Hay (1984) focus on the interplay between language and thinking in shaping the kinds of lives we lead. However, we think it worth considering whether the essential relationships these writers identify—that is, those among language, thought, and perceived realities as they are lived—are all that different despite their having been focused on different outcomes, and having been conceived of through seemingly disparate conceptual frames of reference.

Skeptics among us (and there are many) do not believe that changing one's thinking, and that changing the language through which one expresses what one is thinking, will have such seemingly astonishing effects. Those same skeptics, however, may be intrigued by the well-controlled experiments that have tested the effects of intentions upon living things (such as those conducted by the *Mind Science Foundation* in San Antonio, Texas), and which provide solid evidence of mental influence on a wide variety of living systems from yeast to gerbils[6] (McTaggart, 2007). If we accept that quantum theory has explanatory power for a wide range of otherwise seemingly inexplicable phenomena, McTaggart's (2007) example illustrates one of its basic tenets: that is, that non-materialized energy appears to affect other kinds of energy. Perhaps a more accessible example of thought (non-material energy) affecting the physical body (matter or materialized energy) is provided in Lipton's (2005) discussion of how yogis, and anyone trained in biofeedback techniques, can "learn to consciously regulate "innate" functions such as "heart rate, blood pressure, blood flow/bleeding patterns, and body temperature" through intention (p. 161).

As we indicated earlier in this essay, the notion that language constructs us as a social and cultural phenomenon is not new, but rethinking language as a field of energy is a new way of thinking about its shaping power. Its power, although not identified under the label "language as a field of energy," has already manifested, for example, in the reciprocal relationship between the gradually pervasive spread of nonsexist language in English (Howard et al., 1986; Kite et al., 2001)

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6. McTaggart's work with what are called The Intention Experiments (2007) has been well-received in mind-thought healing communities. While the experiments reported on her 2014 blog post (http://www.lynnemctaggart.com/blog/269-results-of-the-first-healing-intention-experiment) were problematic given the very small sample size and prior exposure of one participant to the 'treatment' method (focused thoughts of healing sent to him by thought-healers described as "intenders") McTaggart is careful to not make wild claims in support of her arguments that thought influences states of being and that those states of being can be captured through brain imaging in both *The Intention Experiments* (2007) and *The Field* (2002). Granted, in scientific terms, rationalism is more appealing than belief. However, dismissing these kinds of experiments (including those on gerbils and yeast) as chicanery is also pre-emptive. Placebo effect cannot, for example, happen unless there is a strong belief by the person involved in such a test condition that s/he has received 'treatment' and that that "treatment" is working although no such "treatment" has actually been administered. If we go to great lengths to control experiments for just such an effect, is it such a leap of faith to believe that matter affects matter through the transmission of what we admit we are loosely naming "energy?" There is much about the assumed "invisible world" that we do not, as yet, understand but which should not be dismissed on the grounds that we don't understand it or that it's outside our individual experience.

and the changed status of women.[7] Reconceptualizing language as a field of energy is, we believe, a new articulation of the power of language. Implicit acknowledgement of that characteristic is also evident in Lakoff and Johnson's (1980) seminal work on metaphor, as well as in the earlier work of anthropologists such as Sapir (1961) and Whorf (1956), that of mystics and healers such as Hay (1984) and Dyer (2004), physicians and psychologists such as Martin (1997), neurolinguists such as Bandler and Grinder (1975), molecular biologists (Lipton, 2005), social constructivist theorists and scholars (e.g., Dewey [1991/1910]; Vygotsky (1961, 1978), and, as cited previously in the work of quantum physicists such as Barad (1993, 2007) and Bohm (1990), among others. Albeit from different disciplinary perspectives, each of these thinkers, healers, and scholars seem to accept a central underlying assumption about the language/thought/perceived realities nexus: namely, that one not only influences the other, but also that how we think (individually and/or collectively), and how we articulate what we think, creates the realities we live.

The field of alternative consciousness has long articulated the damaging effects of negative thinking and negatively laden language to reflect that thinking. Healers of various persuasions have focused on positive language and positive thinking, all leading to similar conclusions about the power of language: namely, that it affects not only consciousness about possibility (or lack of it), but also, over time, our physical and emotional bodies in ways that reflect habitual thinking and how thought is habitually articulated. Readers may be familiar with Peale's (1959) bestseller, *The Amazing Results of Positive Thinking*, and Dyer's (2004) *The Power of Intention*. Less familiar, but equally compelling, are Levine's (1991) *Your Body Believes Every Word You Say: The Language of the Body/Mind Connection*, Martin's (1997) *The Healing Mind*, Backhus's (1996) *The Healing Power of the Healthy Mind*, and more recently, Dyer's (2009) *Excuses Be Gone!*. The authors of these books are not backyard peddlers of faith healing. They are medical practitioners, biologists, psychiatrists, psychologists—in short, professionals who have undergone rigorous training in a variety of fields, and who, through extensive experience as practitioners in their fields, have carried out systematic observations of human behavior in a variety of settings.

Humans have long used language to create our own version of "magic" such as chants, spells, verbal rituals, and mantras. Ritualization, as expressed through language used to invoke power or assistance from various forms of power, is present in every culture. Some may dismiss such ritualizations as superstition. Yet *belief* in a ritual can be so powerful that outcomes can be invoked, as Mercer (2000) suggests is evident in the case of marriage vows and divorce decrees. The pronouncement of certain words in a certain context is enough to declare an act law. What makes it "real" is the *invocation of the words* used (e.g., the "letter of the law"). Such use of language is no different from that proposed in the so-called "self-help" literature that packs the shelves of general bookstores—in this case, language, through articulation, is believed by its proponents to evoke transformation (negative as well as positive). Holmes (1997/1938), as have others, cautions us to eliminate any thought (and its articulation) that we do not wish to realize (i.e., bring into physical

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7. Among the resolutions of the Committee on Women in Psychology of the American Psychological Organization are included explicit directives regarding the use of nonsexist language with reference to women. However, the resolutions also address other areas of gender discrimination that had historically impeded equity in the profession including explicit language relating to the "employment, education, child and health care facilities, psychological theories and practice, conventions, and equity in decision-making, and the general status of women" (p.1). These resolutions were first formulated in 1970 following increasing activism by women psychologists during the 1960s. The current document emerged for the 30th anniversary of the formation of the Association for Women Psychologists (AWP) and also chronicles actions taken by the American Association of Psychologists (APA) Council representatives in response to the 52 resolutions over the subsequent 30 years following their initial appearance in 1970. [https://www.apa.org/pi/women/resources/reports/52-resolutions.pdf]

being). Consider, for example, what reinforcement for negative life styles, or negative impact on our physical, emotional and mental bodies, the following commonly used utterances may have:

- It's a pain in the neck!
- I've got a broken heart.
- I'm a nervous wreck.
- I'm a glutton for punishment.
- I'm sick and tired of…

According to Levine (1991),

> the power of a name (or naming) lies in its ability to evoke an image. "Utter a name and a set of feelings, thoughts, and images typically appear. Mention the name of a disease or condition like cancer or acne, and another set of images appear, accompanied by strong feelings and physical reactions, usually negative. (p. 27)

Continuing, she argues that "as we name a thing, we are also in a sense, causing, creating" (or even prolonging) it (p. 28). Levine proposes a relationship between what she terms a "seed-thought" (i.e., a catalyst for a physical or emotional response) and core beliefs, which again, are manifested through the words we use. "Core beliefs," states Levine, are those "basic assumptions and ideas upon which our everyday thoughts and actions are based" (p. 50). We are not arguing that we should avoid expressing what we fear for fear of instantiating it. Nor should we avoid sharing painful experiences with others because we want to avoid the possibility of extending them. The point of bringing forth Levine's examples is to explore the extent to which limiting, fear-based beliefs manifest themselves again and again through our verbalized thinking and speech, and then, to raise the question as to what underlying beliefs may be at work in ways that undermine our capacity to believe in alternatives. We turn now to a brief analysis of the extent to which philosophers and theorists whose work has significantly impacted the field of education reflects that of the metaphysical healers and psychologists referred to in the foregoing paragraphs.

Although Dewey (1991/1910) viewed language as distinct from thought, and as an essential tool for the delivery of thought, an "intentional sign" (p. 172), he does not appear to have considered language as having a significant role in the construction(s) of reality. We speculate that this omission reflects Dewey's view of language and thought as *inextricably linked phenomena* [our emphasis], and that his argument concerning the need for reflective thinking is related to the role that language plays in the language/thought/perceived realities nexus. Dewey (1964) acceded that language may be regarded as the shaper of inchoate thought into something logical and intelligible. We see intersections between Dewey (1964) and Vygotsky (1962) in their contention that language shapes thinking. Vygotsky (1962), for example, argued that "not only do words play a central part…in the development of thought, but [also] in the historical development of consciousness as a whole" (p. 153). Furthermore, "a word," asserts Vygotsky (1962), "is a microcosm of human consciousness" (p. 153). Both Dewey and Vygotsky believed that "signs do give humans the power to regulate and change natural forms of behavior and cognition" (Vygotsky, 1962, p. 153).

From this perspective, language is conceived of as a medium that regulates human thinking (and hence, behavior), and this "regulation" is understood to be socially and culturally constructed. This commences at birth, and over time we ingest, as it were, the messages conveyed through this

medium so that they modify our perceptions of experience, and hence, what we define as "reality." By the time we are conscious of what we generally term "reality," we perceive it as it has been constructed and reconstructed for us. It is therefore capable of being deconstructed and freshly reconstructed, much as thinkers such as Holmes (1997/1938), Dyer (2004), Myss (1997) and others in spiritual, metaphysical and self-help fields have argued. It is important to note, however, that this understanding of the relationship between thought and language is not solely attributable to New Age spiritualists, but to highly respected icons of social constructivist literacy research. Pinker (2007) suggests that we have some power over language (if we so choose to exert it) insofar as "the human mind comes equipped with an ability to penetrate the cladding of sensory experience and discern the abstract construction underneath…often enough and insightfully enough to shape the human condition" (p. 276). He attributes this ability to our "powers of analogy," which, he argues, "allow us to apply ancient neural structures to newfound subject matter, to discover hidden laws and systems in nature, and…[to] amplify the expressive power of language itself" (p. 276).

Echoing previous arguments that identity is discursively as well as socially constructed, Gee (1998) suggests in a discussion about code-switching that a switch in style "may amount to a change in social identity" (p. 297), both in terms of how individuals perceive themselves and how they are perceived by others. Likewise, he argues that narrative style is "associated with one's cultural identity and presentation of self," and he suggests that by teaching children to "use, understand, and appreciate alternative modes of making sense beyond the ones that they acquire" we can empower students who don't understand or value "their own modes of expression" (p. 306). Mercer (1995) argues that we "use language for thinking together, for collectively making sense of experience and for solving problems" (p. 1). The latter claim may seem innocuous enough, but its application to the lives we lead, to the issues that are pervasive in the world today, and to the ways in which we describe collective realities, enables us to understand how useful, if not critical, it is to bring to awareness the potential impact that habitual uses of language (both individually and collectively) have over time. We are at a point in our history as a species where we have the means to understand how language is not only used to *describe* a particular reality, but also how it shapes us in the process of that construction so that we ultimately believe that what we perceive as reality is, in fact, "reality."

Metaphor and the Creation of the Realities We Live

We have referred to the role of metaphor in constructing our perceptions of experience and, ultimately, of reality, and proceed now to a more detailed discussion of this very significant rhetorical and semantic phenomenon: namely, the phenomenon of metaphor in our daily lives. Bridging the thinking of social constructivism and the world of metaphysics is Lakoff and Johnson's (1980) analysis of the metaphoric power of language. Specifically, they argue that metaphors, in addition to encoding beliefs that already exist and which shape our thinking in particular ways (p. 67), also shape the lives we live. In this sense, they appear to function as guides for future actions (causation). This, in turn, reinforces the power of metaphors to make experience concrete and coherent. In this sense, then, metaphors become self-fulfilling prophecies (p. 156).

In their now classic text, *Metaphors We Live By*, Lakoff and Johnson (1980) explore and analyze how metaphors function as constructs of "concepts we live by" (p. 3). Through metaphor, they argue, we highlight and hide thought, orient ourselves and others, create a cohesive society, provide a mechanism for "the coherent structure of experience," "cement current meaning," and create new meaning (p. 174). Metaphor, according to Lakoff and Johnson (1980), is "pervasive"

in daily life, not only in language, but in "thought and action and our ordinary conceptual system in terms of which we both think and act" (p. 3). That is, our "ordinary conceptual system" is "fundamentally metaphorical in nature" (p. 3). Similarly, Bartel (1983) describes the role of metaphor in daily life as a manifestation of the "interrelatedness of all things" (p. 83), arguing that since everything is related in some way to everything else, "anything can be compared to anything else" (p. 83).

Lakoff and Johnson (1980), Bartel (1983), and Feldman (2006) argue that the significance of metaphor, symbol, and language in our lives comes from their power to *call into being* [our wording and emphasis] what we imagine. Each is in agreement that language is not some inert object. Rather, they regard language as what Lakoff and Johnson (1980) describe as a "dynamic force," one that operates to create a reciprocal relationship between language and life" (p. 75). The significance of this proposition is evident in our earlier discussion of Myss's (1997, p. 75) concern that people define themselves according to their chronic physical conditions. In her experience, their illnesses develop metaphoric force in the course of naming oneself according to that illness. Lakoff and Johnson (1980) would likely argue that such self-definitions function as metaphors of identity (p. 193), and also reflect Johnson's (1987) concern that they become woven into a matrix that "establishes a range of possible patterns of understanding and reasoning" for individuals who so describe themselves (p. 137). Similarly, we have noted that Lakoff and Johnson's (1980) example of the "war metaphor" utilized by former President Carter's administration when faced with an energy crisis is chillingly familiar and often applied not only to the current *war against terror,* but also to the many other occasions in life when we encounter adversity—we *fight* cancer, *battle* illness, *struggle with* an issue, *combat* poverty, *grapple* with environmental pollution, and *campaign against* ignorance. In short, the "war" metaphor is pervasive in dominant culture and in our times.

Geary (2011) notes that one metaphor frequently, if not inevitably, entails another, and provides examples of spin-offs that emerge from the "war" metaphor in non-war contexts: for example, workplace environments. A person might describe herself as "defending her staff," having to "hold the line" on bullying behavior, or feeling "shell-shocked" (p. 218). When "work" is conceptualized using the language of "war," those who work in such an environment become "combatants," suffer "collateral damage," and become "victims" or "victors." The "war" metaphor does not entertain the possibility of compromise, nor does it allow for collaboration to find a mutually satisfactory resolution to a problem. We cannot obviously control all of the possible effects of thought and language, whether on oneself or on others. Nevertheless, a lack of awareness of the effects of our habitual use of "war" language as reported in Grove and Panzer's (1989) work utilizing metaphoric reframing for the purposes of healing traumatic memories, and Lawley and Tompkins' (2000) work with symbolic modeling for coaching and therapeutic purposes, suggests that a rich and grounded knowledge base for promoting awareness of the impact of habitual uses of language that leave patterns of negative consequences in their trail would be productive. If we agree with Lakoff and Johnson's (1980) argument that "no metaphor can ever be comprehended or even adequately represented independently of its experiential basis" (p. 19), then it is indeed time to take the study of metaphor out of the poetry lesson where it has almost exclusively resided in schools and bring it into the language-as-energy-focused classroom.

Language as a Field of Energy and Language Pedagogy

In the past decade, major medical centers situated in research universities such as The Ohio State University Wexner Medical Center, The Yale Medical School, Harvard Medical School, and a plethora of others throughout the U.S. have embraced a role for the Humanities, requiring that medical students choose electives that include creative writing, poetry, and narrative in an effort to reconnect hearts and heads in the training of future physicians. Such centers are also adding to significant research on the role of expressive writing, various kinds of narrative writing, and poetry and their role in the healing process (Lumley & Provenzano, 2003; Niles et al., 2013) as well as in stress and anxiety reduction. The M.D. Anderson Cancer Center in Houston includes a class entitled *Journaling: The Healing Power of Story*. The first author of this paper serves as an advising editor for a literary magazine produced by the medical students in such a university medical center program. It would appear that the field of medicine has come to accept the relationship between what we think, how we express thought, and how we experience what we term "reality." Yet expressive/creative writing has yet to find a legitimate place in schools and in teacher education programs, other than being offered as electives for advanced placement students, if at all.

We suggest that there is no separation between language and the user, and that such a distinction is not only artificial and often unproductive, but also potentially harmful. It is harmful because when we focus primarily on the *structures of language* [our emphasis], as is typically the case in traditional grammar instruction, we focus on these as though the latter are disembodied from their users, regardless of whether they generate language or are on the receiving end of someone else's linguistic utterances. In traditional grammar instruction, the rules of use focus on language primarily within the context of standard, formal written language, and emphasize language as an artifact. As is increasingly acknowledged, classrooms both in the United States and other countries are comprised of increasingly diverse student populations. Grounding language study in students' home dialects and/or first languages, as one of our reviewers suggested, can provide a platform for a language-as-a-field-of-energy focused pedagogy. We are not suggesting abandoning a standard variant, but if that variant is initially at odds with the dominant variants and the home language of many of our students, then exploring the role and power of language in ways we have argued for in this paper would embrace not only the standard variant but those variants which have constructed our students and which they bring with them to school. How, then, can we invite students in our classrooms to become aware of these powers inherent in the language they use, in the language others use, and, in becoming aware of such power, to engage in it as Rose (1989) asks, "in some fuller way" (p. 163)?

In addressing this question, we provide a range of possible directions through four broad avenues. First, language pedagogy, when approached from a language-as-a-field-of-energy perspective, would entail a radical shift from the primary traditional focus on form and structure in the study of language in educational settings to a focus on the *creative power of language* [our emphasis] as it is manifested in its bringing into being that which is conceptualized. Second, such a view of language would include a focus on its metaphoric qualities, but not in the restricted, limited way in which metaphor has been dealt with in the context of teaching poetry: namely, the labeling of metaphor as a figure of speech, and asking students to "find" metaphors in selected poems. Instead, a language-as-a-field-of-energy focus would embrace the multi-layered nature of metaphor, its inherent slant in making the abstract concrete, and its connecting language to the experiencing of related phenomena. We can certainly draw on how this is manifested in poetry since poets intuitively experience language as energy in their metaphoric rendering of the world

and our experience of it. It is a power that lifts the reader, for example, to a new perception of a thing (e.g., a bale of hay) that, in its literal sense may appear mundane, but which, when highlighted through metaphoric language, assumes new metaphorical potential.

Third, actualizing language-as-a-field-of-energy through embracing metaphor as a primary focus in language study also embraces the agentive quality of language (Barad, 2007), a quality that has always been intuitively known by poets, shamans, and healers of all beliefs. Both Hay (2004) and Cayce (2009), for example, urge that in healing, we name not the illness, but the perfect health of the individual undergoing healing. We can choose to teach language in ways that develop students' awareness of how it can perpetuate conflict, judgment, misunderstanding, and intolerance by modeling and having students produce language that reflects harmony, neutrality, empathy, and tolerance. For example, group work might entail the creation of scripts that reflect both conflict-generating language and tolerance-generating language. In a language-as-energy-focused pedagogy, language is a visible medium for transforming unproductive self-and-other-debilitating thinking and behavior. Fourth, a language-as-a field-of-energy pedagogy would also automatically generate a meta-linguistic orientation toward language—we would be constantly evaluating what we say and what we write from the perspective not only of how it is appropriate for our purposes and audiences, but also with sensitivity to what we say and how we say it in terms of its energy quotient. We would already have in place the necessary linguistic meta-awareness to foster reflection about how the language we use has "outcomes" in any interaction.

Enacting a Language-as-a-field-of-Energy Pedagogy

Through a pedagogy that considers all language as a manifestation of intention, as a means by which we create, as well as destroy, and as embedded in individuals as well as in the social and cultural collective, we would enact the study and uses of language in the following ways: as a positive and/or negative force in our lives; the interrelatedness of language and our experiences; and the possibility that we can challenge how collective uses of language (e.g., through media, institutions, collective practices) reinforce beliefs and values that keep us firmly where we have been. We would also embrace the relationship between language and states of being (e.g., through mantras, through poetry, through making linguistic choices in our interpersonal relationships, and so on). In the process of unpacking beliefs, values, and attitudes embedded in the language they use, students can also discover how the language they use, and the language(s) of their social and cultural contexts, serves as both positive and negative forces in their lives. Similarly, through experimenting with alternative utterances, students can be provided with concrete opportunities to develop an understanding that language reflects unexamined beliefs, values, and attitudes, and that the latter can be challenged by using language that reflects different beliefs, values, and attitudes. To a limited extent, such practices are already in use, the most obvious and longstanding one in English written language being to use nonsexist language where possible.

To enact language-as-a-field-of-energy at the practical level, we would encourage language users to listen not only to others, but also to themselves, to the language uttered as well as to the language that runs ticker-tape like in our thinking throughout every waking moment. Doing so would promote the development of a double-consciousness that is essential if we are to reconstruct not only our habitual thinking and our habitual expressions of thought, but also to influence their habitual outcomes through having students develop replacement inner scripts. Studies of athletes and others who have achieved remarkable milestones, and/or overcome enormous obstacles in order to materialize dreams (McTaggart, 2007), report the common finding that the strength of

intentions are the common factor in such accomplishments. The study of inner scripts, of internal directives and internal linguistic monologues, could, therefore, be complemented with the creation of alternative scripts with the goal of having these practiced consciously until they become internalized, an approach that neurolinguistics introduced in the 1970s when neurolinguistic programming (NLP) became prominent through Bandler and Grinder's (1975) work. We'd like to note here that a simplistic adoption of the templated and rigid format of the NLP approach is not what we propose. Rather, the basic principle of language users creating alternative inner scripts is applicable. We are not promoting a simplistic positive-thinking-positive language study approach—that is, a templated, formulaic system. Granted, poets may not become poets given such a system, wild language, as one of our reviewers reminded us, being core to poetic expression. What we are urging is an instructional focus on student's metalinguistic development which would ultimately foster a kind of double-consciousness that enables the production of language while simultaneously being aware of what is being produced and its potential significance.

What we propose then, in adopting a language-as-a-field-of-energy approach to the study of language, is a focus on the relationship between language, thought, and the perceived reality(ies) we live through encouraging students to unpack the language they use in their daily lives. Such a curriculum would begin with the language of the student. The study of individual students' language would focus on students' perceptions of self, their social and cultural contexts, their perceived experiences, their perceptions of their limitations as well as possibilities, and a study of how these perceptions and beliefs are encoded in their language. Such work would:

- embrace a study of language that examines how language is a positive and/or negative force in our lives;
- involve the study of how language has been used to manipulate through various media, and the implications of language utilized in advertising and marketing;
- embrace the study of language that separates the "ordinary" person from the "expert" (pervasive in contemporary culture);
- entail the study of how both individual language use as well as collective language use within both the culture and language of instruction as well as the cultures and languages known to students in our classrooms (where possible) reinforces beliefs and values that keep us where we have been and question the merit of such power;
- involve the study of "language as a form of energy" through its use in mantras, and its use in the lives of people who have overcome significant obstacles, as well as those who have achieved remarkable manifestations of their dreams, goals, and ambitions; and
- promote, through a focus on understanding the relationship between language, the self and the life that the self experiences, the development of an understanding of how language is a powerful force in the creation of the lives we lead.

The radical nature of the language-as-a-field-of-energy concept in educational settings lies in its orientation to language. Pedagogically, such an approach can be pursued through reframing language study to emphasize how language affects us as individuals as well as collectively. For example, we might have students document typical words and phrases they, their families, their local social and ethnic communities, and the media use in order to analyze these usages and what they represent energetically. We might have them focus on the connotations of these familiarly used words and phrases and interpret these in terms of attitudes and beliefs reflected in them. Students might also experiment by replacing them with alternatives, including any habitual fatalistic and

self-limiting phrases that they and their families and communities use. Students could also document the language used by institutions, media outlets, and communities at large, and analyze what messages are being implicitly as well as explicitly conveyed. Literary theory could, in this way, also be employed in studying the language of common experience and use. Each critical perspective calls forth a different and selective view of the text. Students can move from an analysis that assumes objectivity in the text to an analysis that assumes subjectivity in literary texts. The more fine-grained the analysis, the more attention will be paid to specific words and their semantic weighting within various contexts.

Analyses of these kinds raise questions about authorial intention, the nature of the production of information, and, from our experience, opens students to thinking about the possibility that little is what it appears to be. That realization, in turn, can lead students to understand that we, too, *construct* [our emphasis] meaning as well as consume it, and in that sense, experience language as an embedded phenomenon, one that cannot be separated from how and why it is used (Hymes, 1972). The foregoing discussion offers avenues for a pedagogy of language-as-a-field-of-energy that accepts a view of language as a shaping force which can be explored in terms of its impact on individual consciousness. Such a pedagogy then becomes the intersection where social science, neuroscience, quantum physics, and linguistics meet metaphysics. Sensitizing students to language from this perspective provides them with personal as well as communal reasons for the study of language, and therefore, reasons which generate authentic goals for such study.

Language-as-a-field-of-energy Pedagogy and Teacher Professional Development

What are the implications of a language-as-a-field-of-energy pedagogy for the education of teachers, whether pre-licensure or post-licensure? To date, the training of teachers with respect to mother-tongue English language education has been one of the most neglected areas of teacher education pedagogy for a variety of reasons, although space constraints preclude our delineating that history in the present paper. However, some discussion of the issue is warranted. Based on the extensive knowledge both of us have of English teacher preparation programs in the US, we can state that the primary focus of that education is anything but uniform; more often than not, English teacher preparation is skewed toward literature instruction, and it is broadly focused on informational writing instruction. Teachers' knowledge about theoretical and applied linguistics appears to be random and if they experience it at all, is embedded in other topics in general English Language Arts methods courses for secondary teachers. In post-graduate professional development courses with K-12 reading and language arts teachers we have similarly found that there is anything but consistency in teachers' knowledge of pragmatics, of semantic structures as reflected in use, of grammar as a rhetorical system, and of the semantic roles of what Pennebaker et al. (2003) term "particles" (articles, pronouns, prepositions, conjunctions, and auxiliary verbs). Influenced and pressured by state and national mandates, teachers' language-focused feedback on student writing is often skewed toward identifying grammatical, punctuation and spelling errors. The rhetorical roles of grammatical structures are, for the most part, rarely addressed in feedback or in writing instruction.

We did not, in this essay, focus on grammatical instruction as a key area for consideration in the development of our conceptualizing of language-as-a-field-of-energy-pedagogy, although the role of grammar from a rhetorical perspective could be considered one of the proverbial elephants in the room in our articulating the concept. It is certainly an area that we continue to explore

as we build our case for a language-as-field-of-energy pedagogy given its important role in met-alinguistic development. That said, as educators, we are concerned that the study of grammar, as it has traditionally been taught, marks the limits of language instruction in school settings. The question, for us, is not whether educators should teach conventional grammar or invite students to study and explore language-as-a-field-of energy. Rather, we argue that attention should be paid to both domains of language study, something that has heretofore not been the case.

We cannot teach students to become proficient, metalinguistically aware language users if their teachers have a limited understanding of how language works at the grammatical and rhetorical level since we utilize the grammar of our language(s) for rhetorical purposes. That said, since language is the primary means by which we communicate our intentions, our thoughts, our attitudes and our values, teachers will also benefit from experiencing language-as-a-field-of-energy in their own lives, in order to reconceptualize what they mean by "language" and "language teaching." Such a graduate level course has been developed by the first author. Feedback from participants has been enthusiastic and indicates a commitment to pursuing their continued self-study of language use in ways proposed throughout this paper. Teachers we have worked with have often expressed frustration that their own limited knowledge about linguistics, about traditional grammar, and certainly about the relationships between grammar and rhetorical purposes is inadequate at best, and woefully hindering in practice. We realize that teacher education programs juggle many competing requirements with respect to licensure. At the same time, we call for a deep and thoughtful overhaul of what is (and is not) required with respect to a solid foundation in language study, both for entry into licensure programs as well as for professional development programs.

Concluding Thoughts

We applaud the emergence of language teaching texts that address relationships between language and power (e.g., Harmon & Wilson, 2006), language as a tool for stylistic variation (e.g., Noden, 1999) and texts that stress the relationship between language and contexts of use (e.g., Weaver, 1998, 2008). The propositions about how we make meaning through written language as expressed in these books are sound and well-grounded in theory and in empirical research. Harmon and Wilson (2006) note in their introductory chapter the now widely accepted argument in scholarship of critical literacy that:

> It is a commonplace to discuss the obvious influences of thought and culture on language—how what we say and how we say it are largely a result of our cultural influences and experiences—but it is equally important to consider the reciprocity involved in language and culture—how language influences thought, reinforces it, and shapes it…linguistic patterns (according to linguists) have the potential to constrain one's thinking and shape it in culturally significant ways. (pp. 27-28)

Even so, language pedagogy has continued to primarily focus on how the language we produce is received by others in terms of its appropriateness, and its adherence to conventions of use—not on how it affects ourselves, and the relationship between the language we habitually use and the kinds of lives we lead. Unless our automatic ability to produce our habitual streams of language has been compromised in a significant way, we take such ability for granted, as neuroanatomist Jill Taylor (2009) discovered when she lost access to her left-brain (which houses the language center) following a massive brain stroke. Taylor recounts that through her attempts to regain access to her

left brain, she discovered that her scientific orientation had excluded right-brain thinking—that is, thinking which is holistic, related to feeling, and related to qualities of language normally dealt with primarily in the context of poetic uses of language. Her eight-year long journey to recovery led, among other things, to her discovering that when she fell into negative states of being, using language that affirmed the positive enabled her to shift her emotional state correspondingly. Moving from despair, fear, defeatism, and helplessness to hope, strength, and belief in her ability to regain her left-brain faculties also led Taylor to discover that we are indeed in charge of how we perceive external as well as internal states and conditions. Furthermore, she found that we can not only transform how we feel about these states and conditions, but also transform those that we perceive as defeating, limiting, and overwhelming. Critical to her recovery was the forced acquisition of new vocabulary because she realized that the words previously possessed in her linguistic repertoire, and which she could again retrieve, were now perceived by her to have negative effects on her ability to heal as they inhibited her ability to take charge of her healing process. In essence, Taylor had to become aware of the nature of her habitual linguistic palette in order to choose to change it—to become a new person, an integrated person, and a person who embraced choice as central to her journey toward reclaiming a mind that had been severely compromised by the stroke. According to Taylor (2009), central to her recovery was her understanding that how we think, and the words we use to think with, determines how we live and what we live.

We believe that embracing the concept, "language-as-a-field-of-energy," is now more urgent than ever as contemporary media and technology, which are much more immediately accessible than print media has ever been, have become the primary forms of communication for many who have access to them. These media make language visible and readily amenable to examination. These media also enable people to easily transcend regional and national borders. How we think is, therefore, also more visible through these media. In essence, contemporary forms of technology enable mass communication in ways that have both positive and negative implications. Fear, intolerance, and other forms of negativity can literally spread wildfire-like through these media. Conversely, so could positive attitudes toward change, the embracing of solutions to enduring problems, and the acceptance of unfamiliar beliefs and behaviors. We suggest that it is time to embrace a concept that has significant implications for all of us, collectively as well as individually.

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An Education Foundations Course and Teacher Research: Addressing the Impact of Local Homelessness on Education

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Abstract

Homeless education is studied through qualitative teacher research. This article reports the perspectives and experiences of a school administrator, social worker, teacher, and Family Shelter school-to-shelter liaison in describing their experiences with homeless elementary students and their parents. College faculty did the research to prepare for a teacher education foundations course for preservice teachers.

Keywords: *homeless education, k-12 education, homeless immigrant education, social foundations teacher education, teacher research*

Introduction

Our changing community: food banks with empty shelves unable to provide enough food for families during the summer months when children are out of school; men and women on street corners across town holding signs pleading for money, food or shelter; and, five homeless shelters all over capacity. Additional community challenges include complications such as language and cultural barriers that arise with an influx of refugees to the shelters, and stereotypes of the homeless that pollute the community, largely uneducated on the shelter population and issues surrounding homelessness. Our campus: a small Lutheran liberal arts college consisting primarily of white middle to upper class individuals. The dilemma: how to assist our students, teacher education majors, in understanding the realities of life for children and parents who are poor, diverse, and homeless.

An Education Foundations Course

Our students are teacher education majors preparing for careers in elementary, middle, and secondary schools. Social justice is valued on our campus, a liberal arts college of approximately 2,700 students in the upper mid-west. Service projects and service learning bring students into the larger community in varied ways, some day-long events and others involving commitment over time.

For our students to not only meet the college's mission of being responsibly engaged in the world, but to teach well, it is important that they prepare to interact with the diverse families of the students they will serve. *Education 212: American Education in a Diverse Society*, is the initial foundations course in their curriculum. In that semester-long experience, which includes a field

placement in an English language learning classroom, students read about and research the ethnic backgrounds of public school children in the United States. They investigate and present contemporary as well as historical issues. But, we came to recognize that the local issue of homelessness and homeless education were not being adequately addressed through students' reading, research, and class presentations.

We read articles on homeless education, discussed the McKinney-Vento Act (http://www.naehcy.org), and watched The PBS *Frontline* documentary *Poor Kids* (www.pbs.org/wgbh/frontline/film/poor-kids) which follows five rural Iowa families as they lose their housing and resettle into motels or shelters. These provided a glimpse into homelessness, but our role as educators and the reality of working with homeless students was left relatively untouched. Clearly the impact of poverty and homelessness on a child or adolescent in school is powerful and must be considered by educators. Shepard and Booth (2009) wrote "…studies have documented that pre-service teachers from White, middle-class, and monolingual backgrounds tend to have stereotypical beliefs or misunderstandings toward children from diverse backgrounds" (p. 162). To avoid this, our students who for the most part matched this description needed to become closer to the issues.

A small group of our students, members of Education Club, have an extended and active involvement as volunteers at Family Shelter. Children must be supervised by an adult when in the shelter's playroom. When student volunteers supervise and interact with children, parents can conduct job searches or meet other responsibilities. Without help from volunteers, toddlers may spend most of the day in a stroller while parents attend to pressing personal needs. These Education Club students developed an understanding of the circumstances surrounding homeless children's lives and the impact these circumstances can have on their education and well-being. But we need all students, not just a select few, to leave with this understanding. Somehow our students needed to be let into the lives of homeless children and adolescents. Before we could help them become more deeply immersed in the issue, we need to immerse ourselves.

The purpose of our research, including a literature review, observation in the public schools and at the family shelter, and through interview, is to understand the impact of homelessness on children's education. In our study, individuals, as well as the metro-community, school, shelter, and college, is given a pseudonym.

Methodology

Numbers and percentages give important insights. Kvale and Brinkmann (2009) remind researchers that "…qualitative methods refer to *what kind*, and quantitative methods to *how much of a kind*" (p. 117). The numbers of homeless children, grades 1-5, attending Red River Elementary, tell us that the school absorbs a high number of transient students. And, the numbers of individuals at Family Shelter suggest a crowded environment, but we needed to know more. We needed to know the experiences of the homeless children and the impact those experiences have on children and school.

Comprehending the ways in which children—those who are homeless and their peers in classrooms—are touched each day by the issue of homelessness requires listening to people's stories. Because all of the elementary-aged children living at Family Shelter attend Red River Elementary, interviews with the school principal, classroom teachers, and school social worker are essential. Family Shelter's Community Coordinator offers an invaluable perspective, giving us a look at the daily lives and shelter routines the children experience before and after school. We

included a walking-tour interview in order to see the shelter space and meet mothers and pre-school children during the day. (Our interviews did not include talking directly with parents or children at the shelter, because our focus was on the public school.)

Interview was our research tool. Prepared interview questions began conversations, but follow-up questions and stories took us further. Open-ended questions allowed participants to help guide the conversations. Participants were interviewed individually. After the interview questions were specifically answered, more generalized conversation began. Conversation moved from what experiences are in public schools, family shelters, and teacher education programs, involving homeless education, to what more needs to be or could be done in each of the settings, particularly through partnerships. Each participant was interviewed twice and added additional information and stories during a panel presentation at a Vocation Retreat held for education students later.

Kvale and Brinkmann (2009) further remind us that "good research is research that works" (p. 51). In our research we interviewed adults whose work connects them to the lives and needs of homeless children and adolescents daily. The interviews and conversations became texts for examination and the resulting reflective narrative uses story to describe and explain our findings. Lyons and Kubler LaBoskey (2002) confirm that narrative provides "…a way of gathering up knowledge of practice, simply, a way of knowing…" (p. 3). They continue, "As inquiry, narrative involve[s] an intentional reflective process…constructing and telling the story of its meaning, and predicting how this knowledge might be used in the future" (pp. 2-3). Our research is put to work teaching education majors, who, in turn, will teach diverse populations of children and teenagers, some of whom will be in poverty and some of whom will be homeless.

Meeting the Interview Participants

Principal Matt Olson, an experienced administrator of 16 years, is in his early forties. He holds eye contact intensely, his full attention given to whomever he is talking with. Mr. Olson made a career decision to always work in schools with diverse populations and high percentages of students identified as being of low socioeconomic status. Energy, commitment, communication, and an extraordinarily high value on relationship are qualities of his leadership. Matt Olson has been the principal at Red River Elementary School since 2011. An athlete himself, Mr. Olson coaches community youth hockey, baseball, and football.

Travis Larson, with his quiet and calming presence, has been teaching third grade at Red River Elementary for four years. In our conversations it is difficult to image him rattled. Travis is centered and flexible. In addition to his teaching duties, he leads the after school intramural activities and assists with the fifth-grade student leadership program at Red River Elementary School.

Natalie Johnson works for the school district as a school/shelter liaison. In her role, she facilitates communication between parents at the shelter, the schools, and various service agencies. Her investment and enthusiasm for her work is obvious. Natalie's words tumble over each other, and she is both realistic and idealistic in talking about the lives of homeless children.

Laurie Nelson, quiet, organized, and dedicated, was newly in her position of Family Shelter Community Coordinator when we met her. Previously she worked in fund raising for a private college. But, at our initial interview, only three months into her work at the shelter, she provided a wealth of insight into the life of the children there. A parent herself, Laurie's concern for everyone at the shelter is professional yet personable, and she takes seriously children's developmental

and social needs. Laurie is an educator at the shelter for parents and children, helping in myriad and unanticipated ways each day.

Understanding Our Students' Initial Thoughts on Home, School, and Homelessness

To help us understand what our students think and feel about the concepts of home, school, and homelessness, we used Prospect's Descriptive Process for a Reflection activity (Himley, 2002). The process is more than a free-association list, though it appears that simple. Participants list thoughts and feelings—their personal connotations and memories—of a concept, then each shares and explains his or her list. A note-taker thematizes the lists and notes from verbal explanations. The written compilation becomes a text to be interpreted. It serves us as a resource, giving us insight into our students' experiences and prior knowledge about home, school, and homelessness. Having these understandings prepares us to help students make needed comparisons and contrasts to the experiences and knowledge of the homeless students in their future classrooms. The compilation of Reflections gives us insight into what our students, who by in large experienced lives of privilege as children and adolescents, value. Knowing our students' values helps us shape questions to consider what is different—not what is more or less moral, but what is different—or homeless children and youth. A brief summary of our teacher education students' thoughts and feelings on home, school, and homelessness appears below:

Our students understood "home" to be personally their own, a place for my things, my bed, my bedroom, my family, my pets. Inside their homes were spaces for family, friends, cousins, and meals made every day by mom or made for special holiday occasions by everyone. One student mentioned the smell of home. Listening to music, watching movies, finishing homework, playing card games, and resting were activities at home. Home felt safe, comfortable, welcoming. Home extended into the yard as well. Bonfires, football games, basketball in the driveway, fixing food on the grill, putting on backyard skits, and enjoying neighborhood block parties were part of students' reflections on home. Pets—dogs, cats, turtles—and their particular names were part of the family inside and outside the home.

"School" was associated with subject areas, some positive and some less so, and memories of favorite teachers, adults who cared and nurtured our students through elementary, high school, and college. Friendships formed at school, as well as teams, and collaborations involving school activities such as choir, band, debate, football, basketball, and wrestling appeared on our students' lists. Coaching relationships were sometimes likened to parenting. Travel with teams and organizations provided adventure. The accouterments of school—classrooms, desks, libraries, books and computers, and locker rooms—were remembered as plentiful. School lunches received mixed reviews and laughter. Our students reflected on learning to manage time and learning to research. For a small number of our students, school brought memories of bullying and fighting with friends, but overwhelmingly, for our group of teacher education students, school was a positive place where they were successful and had fun.

Our education students thought of "homelessness" with regard to where people spend the night. They listed shelters, park benches, cardboard boxes, under freeways, in cars, and on the street as places to sleep. People's need for food was on students' minds, appearing on their lists in words such as hungry, soup kitchens, and food stamps. Homelessness was associated with being dirty or wearing dirty clothing. Feelings and emotions such as insecurity, anxiety, uncertainty,

being scared, lonely, sad, and desperate were identified. One student identified "enormous appreciation for those who care." Safety and a need for protection from street crime were specified. Finally our students listed alcohol, drugs, and addiction when considering homelessness.

The Reflection gives us cause to consider our students' emotions, experiences, and values about home when developing our interview questions. What does having a home mean to them? In thinking about this, how would students without stable housing respond to the same reflective question, what would be missing, and what would be added? In the same vein, considering the themes that arise around the concept of school, what might be different about responses from homeless students? What, that our students experienced and valued, might be altered or eliminated because of the circumstances surrounding homelessness? These considerations help us in beginning to consider what we need to ask to ascertain an understanding of how circumstances surrounding homelessness impact experiences and values in the context of school.

The Community

The school and shelter are in Plainsville, a small mid-western city with a population of 39,398 and a sister city that, together, creates a metro-community with a population of 248,237 people. The median income of the community as a whole is $50,088. The metro-community includes two state universities, a private college, and several two-year colleges. There is technology and medical industry, and booming construction, but agriculture is the region's economic engine. Within the metro-community there are five shelters for the homeless. Three are for single men and one is for women and children. The shelter with which we worked, Family Shelter in Plainsville, is the only one to offer housing for entire families in addition to single men and single women.

The homeless population in the community underwent change in the past 10 years. Of particular impact was the recent oil boom three hundred miles west of the metro-community. With so many jobs available, Laurie, the shelter's Community Relations and Communication Director (personal communication, August 19, 2014), recalls, "People came with nothing but a car." As the jobs began drying up, people were left with nothing and came to the metro-community, ending up at the shelter. An additional change is the ongoing influx of refugee immigrant New American families in the community sponsored by Lutheran Social Services. As Laurie, explains, "Homelessness isn't an issue alone now in this community. It's homelessness with English Language Learner needs. This is a change in the last five years. It's gone from a mentally ill population to a refugee and New American population." While there are services provided for those with the designation New American, if they move from the state where they were initially placed, they lose support. Given that the metro-community is divided by state lines, individuals often do not understand that, even though they may be moving only a mile, it can significantly impact the support they are provided. Laurie, informs us that "many shelter residents lost 'New American' status because they moved to the community from their initial locations in the United States, and with the loss of designation comes the loss of services." The loss of this support leads many families to turn to the shelter. An additional issue with New Americans, Natalie tells us, is that "Families are now in the shelter for longer periods of time than they were five or six years ago," because

immigrant families tend to be larger than typical American families, making suitable housing more difficult to find.

In discussing the changes in the face of homelessness in Plainsville, Natalie expresses concerns regarding the community's perception of the homeless. "The public hasn't been well educated. There is a perception that the families at Family Shelter would be involved with crime and selling drugs, etc. But, in reality, the families involved with drugs would be staying with [other] families because they wouldn't be able to follow the rules to stay at the shelter."

In the city of Plainsville there are three elementary schools, but all students from the homeless shelter are enrolled at Red River Elementary. Red River is a K-5 school that during the 2014 -15 school year served 812 students, 37 of whom lived at the homeless shelter. Even though, as the principal states, "75% of the shelter population have heavy need for extra services", no additional funding is provided by the district. The school previously had a state grant to fund a school liaison to assist the homeless families but lost the $30,000 to inner-city schools where the percentage of homeless students was higher. Because there is no longer any additional funding or support provided by the state or district to help these students, building administrators must create solutions using what they already have.

The Shelter

As previously stated, Family Shelter is the metro-community's only shelter where entire families can be housed together. In the 2014-2015 school year, Family Shelter was home to 145 children and adolescents, 57 of whom were English Language Learners and New Americans.

Family Shelter uses a building that once was a furniture store. The repurposed space features large windows on one side and a full basement. There is a dormitory for single men, a dormitory for single women, and nine family rooms (one-room family bedrooms). There is a separate lounge area for families and one for single men and women to share, as well as the dining room which doubles as a community room for all. Everyone at the shelter, regardless of age, is required to be indoors by 10:00 p.m. Use of alcohol and drugs is prohibited. (There is a wet shelter for men in the metro-community.) Scheduled meals are served by volunteers.

Laurie, the shelter's Community Coordinator, meets us at Starbucks for her first interview. It is back-to-school time and she comes from helping a Somali mother and her children who have just moved from the shelter to their own apartment—relationship binds Laurie to them, though they no longer are affiliated with the shelter. "The community is good about providing free haircuts and the YMCA's Backpack Program is great for school supplies, but there just isn't affordable housing. The community needs to be better educated about the need for housing people can afford," she tells us.

"Consistency is what is most needed," Laurie tells us regarding the children's lives at Family Shelter. She echoes the words of the school principal and classroom teacher who told us that routine is impacted by homelessness and that school is a setting that can provide routine in children's lives.

Laurie tells us that "a fair number" of parents living at the shelter work. Their work lives and children's school lives intersect, but not always for the best. "Families sometimes can't sustain jobs because of the intensity of their children's behavior at school. Mom loses her apartment because she has to keep picking her child up from school and loses income or loses her job completely," she explains. Children and adolescents cannot be unattended at Family Shelter, so anytime a child is sick or sent home because of behavior issues, a parent must be at the facility with

the child. Adolescents are more likely to have already given up on their family and be couch-hopping with friends, Laurie adds. "Few adolescents beyond age 15 or 16 stay long at the shelter with their families. But these elementary aged children are still so hopeful," she mentions.

"Any kind of enrichment is hard for families," Laurie tells us. Ordinary activity such as help with homework and bedtime reading is difficult. English language skills can be a barrier to parents' ability to help children or teens with homework. There is no wireless internet connection for students' whose homework may require it. Family Shelter offers three family bathrooms with tubs, but with the number of children and families at the shelter, parents' time to talk and play with children during nighttime bathing routines is limited. With what many middle-class families consider necessities in family life—homework encouragement, bedtime reading, bath-time bonding and language skills development—at a premium, it is not surprising that volunteers provide the majority of enrichment the children at the shelter enjoy. Summer 4-H Club and college students' volunteer services for Saturday Art are among the activities that add to the children's life experiences.

Shelter Life

In working with our preservice teachers we heard their reflected associations with the concept of home. Terms like "safe, comfortable, pets, my own room" filled the lists. But for us their responses begged the question, what was life like for the students whose current home was the shelter, and how could that impact their school experience?

"One of our biggest concerns for homeless children is the stability of their housing," Natalie reflects. The atmosphere at any shelter, even with the best intentions of everyone involved, would, by definition, be impermanent. Our findings matched those of Hinton and Cassel (2013) who wrote, "Living in shelters can cause families with young children to feel insecure and vulnerable" (p. 458). As Principal Olson states, "The cycle of poverty is so vicious, and students bounce from school and locale, to school and locale. School is a good place for them."

Family Shelter works to provide stability for families by creating more affordable housing, but efforts so far have failed. While Family Shelter owns land and plans to build an apartment complex with affordable units, and rules similar to those at the shelter, the initial presentation to Plainsville was not well received. Under pressure to meet a deadline for a major grant, Family Shelter administrators worked diligently on the planning but rushed the time for community comment. "It was not explained well," Laurie says. She indicates that the neighborhood did not understand that the apartment complex would have the same rules as the family shelter and that there would be much more scrutiny on residence behavior than any private rental company could impose. The grant opportunity was lost because of community objection to the location of the future complex. Laurie indicates that the overwhelming neighborhood sentiment was, "Not in my backyard." Family Shelter still owns the land and will work to move forward with better community communication when a new grant opportunity is found. Until that time instability of housing remains a reality in the metro-community. Desmond (2016) writes, "Universal housing programs have been successfully implemented all over the developed world. In countries that have such programs, every single family with an income below a certain level who meets basic program requirements has a right to housing assistance" (p. 309). Laurie talks with us about her determination to help educate the citizens of Plainsville and to try to see the project to fruition.

In a similar vein of discussion Mr. Olson reflects on a feeling of anxiety that any community likely has about homeless people in general. "Every community wants them out…no one

wants the problem. But school dropouts will offend somewhere, if they drop out." He provides an example of homeless students from his previous elementary school, whom he now recognizes in their mugshots on the nightly news reports when charged for burglary or drug offenses. "With kids bouncing around from schools and locations, they will probably drop out and will probably offend in the future. Society needs to deal with them in other ways," Mr. Olson tells us. He feels strongly that school can make a difference for these students, and he has seen it happen, but it takes consistency and time. With regard to this, Mr. Olson states, "Keeping kids at your school for a year—you can do a lot—if they can be there every day."

Mr. Olson's deepest concern for some of the shelter children at Red River Elementary relates to what they see and are exposed to at the shelter daily. Family Shelter is crowded with strangers and there are volatile families that are embattled with other shelter families, and the children bring these issues to school. A further concern is that Family Shelter houses single men, and "some are offenders or shady characters," he tells us. "The community should question this hard," Mr. Olson says, "I would rather see a women's and children's shelter." Hinton and Cassel (2013) found that "homeless families reported not feeling as 'safe and secure' in their environment as compared to housed families" (p. 458). Jonathan Kozol (2012) wrote that "children in New York City living with mothers at the Martinique Hotel, a homeless shelter, were exposed to "…the pervasive atmosphere of insecurity and high anxiety…" (p. 6). Going on to speculate about lasting effects, Kozol (2012) asked, "…what enduring influence all of this would have upon the capability of children…to believe in any kind of elemental decency in people who have power over their existence. Would they later find it hard to trust [and respect] the teachers in their public schools?" (p. 8-9).

Travis mentions some of the effects in students' lives from being at Family Shelter. "There is trauma that is sometimes unidentified, and basic needs are not met because of the absence of routine," he explains. "Children come to Red River Elementary …tired from sleeping on the floor with people walking through the area. Although there are healthy meals provided at the shelter, many students suffer from hunger. Unfamiliar with "American cuisine" many children will not eat what is provided." While one would assume that the mothers could prepare more traditional meals for their children, because of health code regulations they are not allowed in the kitchen. In addition food is not allowed to be kept in the family rooms for sanitation reasons so many children are "not eating because they don't like the shelter food and parents let them not eat." Natalie adds. Of course hunger and the related fatigue complicate concentration and behavior problems at school.

The inability for children to focus on and care about school is often difficult because there are too many issues clouding their minds. Natalie notes, "These kids know too much about big people's problems like bills, paychecks, evictions." Beginning a sentence he does not finish, Mr. Olson reflects, "what these shelter kids see and are exposed to at the shelter—volatile situations, crowding, drugs and alcohol, violence…They need to be in school for their lives and their education to improve."

Lack of privacy is an issue overall in life at a shelter. In Plainsville, the school bus stops directly at Family Shelter. "With the bus stopping at the shelter, all the kids know who the shelter kids are," Mr. Olson explains. Due to assumptions often made about the nature of homeless students, there can, on occasion, be conflict in which it is easy for non-shelter students to blame those living at the shelter. Natalie comments that some emotional wounds come from shelter vs. non-shelter interactions between children. She recalls,

> A 12-year old girl returned to Family Shelter crying and crying because of being accused of something she had not done. You know how you just know when a child is telling the truth? It was a shelter vs. non-shelter conflict. A non-shelter child at a summer YMCA program had misbehaved and blamed the shelter child. The Y teacher had been told there were witnesses. But the experience was crushing this sweet girl's spirit. I looked her in the eye and gave her a hug and said "I believe you." Her kind-hearted, sweet-spirited father now was worried that his daughter would be punished.

A situation such as this leaves the parent feeling powerless to help his child. Hinton and Cassel (2013) wrote, "[S]helter conditions [and being known to live at a shelter] can…hinder parents' feelings of control and independence over one's own life" (p. 458).

With all of the challenges and insecurity surrounding life at the shelter, individuals interviewed still believed that school can make a difference for these children. "Life is crazy. School is a good place to be," Natalie observes. For Travis, what stands out is the determination some children show in their education.

> There was one child who had a house but was borderline homeless. It would be 40-degrees in the house. He lived just beyond the bus route so walked to school and would be there at 7:00 a.m. watching cartoons in the lobby when I got to school,

he tells us. For Travis, this represented the resilience students can demonstrate when provided with a stable welcoming environment at school. As Shepard and Booth (2009) write, "Healing for them does not come from talking about their trauma in isolation, but from being in a structured community that enables them to have healthy relationships and develop a sense of accomplishment…" (p. 15).

How Homelessness Affects Everyone at School

When a homeless child arrives at Red River Elementary everyone is affected. A new, unique individual enters the school community, and, their needs must be met immediately. "The presence of the homeless students impacts the overall student population," Mr. Olson tells us, going on to say that secretaries, teachers, paras, counselors, special education teachers, custodial and lunchroom staff, students, and administrators are impacted. In one recent school year, Travis, a third-grade teacher, had eight homeless children come and go from his classroom.

Because homeless students come to school with immediate needs for special services, students already placed in Title 1 programs, are often removed to make room for the new students. Mr. Olson says,

> These are heavy hitters who need immediate help and Title 1 services. Some of the students from more stable families, who clearly need and benefit from Title 1 help, get bumped from support services because the homeless students have critical, immediate needs.

As Hinton and Cassel (2013) note, "Developmental delays, such as below average vocabulary, an inability to focus, or issues of anger and resentment towards life may be present," (p. 463). Still,

Plainsville offers no additional or special funds to Red River Elementary, even though it is the school with the highest number of homeless children because the shelter falls within its boundaries.

Travis tells us that "there is a loss of learning time for the full class when a new student arrives because of the need to reteach all the classroom and school procedures." Nevertheless he optimistically comments, "The day when a new homeless student comes to school is not a lost day for the others, but it is a day when I spend more time with the new child and spend a lot of time repeating instructions."

How a homeless child behaves is noticed by peers and adults in school. The magnitude of the impact on the class depends considerably on the new child's behavior. "Discipline and behavior is huge. When they come in, they can tear it [the expectations and routine] apart," Travis reflects. Remembering one transient student newly arrived from California, Travis tells the story of a child who was "wilder than wild."

> The other children in the classroom wanted him gone. Kids didn't like him. He couldn't help his behavior when he was missing his meds. He was ADHD and couldn't keep his hands off other kids and had outbursts of yelling. This child started out rough,

he explained. But with time, compassion, and support can come change. After a significant number of months in Travis' third grade classroom, the child moved to another school in the district. Travis saw him at a sporting event, and the boy called out to him that he missed Red River Elementary.

Reflecting on student relationships in the classroom Travis states, "Other children know who the shelter kids are. Often they are shy and kids accept them if they are acting like everyone else. But if their behavior is way off of school behavior—biting, hitting, shouting—then not so much." Discussing his appreciation for the diverse population of the school, he comments, "My third graders aren't living in bubbles. They learn that people are people. I think we are doing something right. We have the country club neighborhood and the shelter kids together [at the school]." Smiling and reflecting on a story of acceptance Travis shares, "There was a third grader from Somalia playing soccer at recess, and, for that short time, he was just a kid, not a homeless kid."

Helping everyone at school adjust and make the most of their time and talent requires teachers and administrators who understand diversity, including the differing needs that come with being homeless. In addition to school staff, families involved in the school and community need to grow in their understandings of diverse populations. As noted by Shepard and Booth (2009), "Homeless children and their families have been either invisible in school or blamed for the weaknesses and defects in their learning" (p. 162). For Mr. Olson, as well as for Natalie, the school social worker, educating teachers, families, and children is a critical part of their jobs.

Meeting Needs

Children at the shelter face insecurity, safety issues, lack of sleep, hunger, and trauma. These are significant needs that must be addressed by the school. With each child and situation being unique, needs may vary greatly. The school must be vigilant in gathering as much information as possible about the children, their history and their family situation, to be able to effectively address these concerns. Natalie, the social worker, notes that communication is even more

difficult when working with New Americans. She contrasts that experience with that of local families. "With local homeless families, it is often easier to have communication and to have a relationship with parents. It's easier to help teach parents what's good for kids because it is easier to communicate."

Travis stresses the importance of securing a student's file as soon as it becomes available and scouring through to learn as much as you can about his or her previous school and family background. For some students, files with histories from former schools may follow them to their new location, including academic records, needs, and experiences. For others no such file exists and the process of establishing an understanding can begin only through discussion with the parent and child. Travis notes, "Communication with parents is difficult. One child's [parents] had five cell [phone] numbers in a school year. I wanted to let parents know something he was good at, but there was no working phone."

Given the limited amount of information that generally accompanies children on the first day of school, knowing how to best meet student needs is often difficult for the school and teachers. As Natalie indicates, "ELL children often come to school with no specific birthdate to help us assess before making a classroom placement. We have to enroll them with very little information and try to make the placement successful." While Natalie is extremely supportive of the benefits the law provides for students and their families, she expresses concerns that "McKinney Vento limits opportunity for success because placements happen without full information." She also indicates that "the tricky part for an administrator is which teacher to put a transient child with—which teacher and what class size." When and if the school finally receives the information they need, they are often hesitant to move the child to a different classroom. As Mr. Olson states, "At that point you just want them to have some consistency and moving to a new classroom with a new teacher and students is more than they need to handle."

Establishing trusting relationships with both students and families is a continuing theme in meeting students' needs. Natalie indicates the first step is actually getting the parents into the school building. She shares one strategy, "Bringing parents to the school to see what it looks like helps establish parents' understanding of where their children are going during the day." Some immigrant parents have no context for what a school might be like and the personal visit is an attempt to try and "demystify school for them."

Communication between school and home is a known factor in student success. Most schools now provide some sort of computerized system intended to assist parents in tracking the children's grades, assignments and announcements that relate to school experience. While theoretically these online tools, such as PowerSchool, are intended to enhance school communication with parents, for the families at the shelter it is often an additional barrier. Because many of the parents do not have the skill to use it, the school secretaries at Red River work with parents in the office to assist them in establishing an account. Mr. Olson voices his frustration with complexities indicating that he himself, an administrator in the district, struggled in getting his children's accounts established.

Travis also offers several suggestions for establishing relationships with parents. "Share positives, take time to call parents; spend time in the hallways with parents when students first come to the school." Natalie indicates that parents are often scared of contact from the school, "They see a 284 number and know it is coming from the school, so they don't answer." In one situation Travis managed to circumvent this issue. A child's parents had refused all invitations to come to the school and meet with him. As an incentive Travis offered 30 Dojo Points (part of a classroom reward system) to the child for bringing his parent to school. The following day "the

third grader came down the hall practically dragging a parent to get those points," Travis tells us. Making these connections is an essential component of student success. As Travis states, "There's a lot you can get done when parents will work with you."

As if there are not enough barriers and challenges with being transient, there are additional consequences for students with special needs. Natalie informs us that, "Children from the shelter are under-identified for needs and services because attendance is an exclusionary factor." "Many of the children (ages 5-12) had low academic skills and a history of poor attendance related to frequent moves and homelessness" (Shepard and Booth, 2009, p. 13). While teachers and administrators may be aware that students should be able to be identified and qualify for special service, Natalie indicates, "The school can't label a child with a specific learning disability if they can show lack of attendance [as a factor]." Because of this teachers and administrators have to develop creative solutions in attempt to meet all children's' needs regardless of qualifying labels. As Principal Olson was quoted earlier in the article stating, "You have to work against the rules, moving paras and services around. You do what you do because you have to live with it. You can't just sit behind a desk and make a budget schedule."

Many of the issues that arise with the homeless students are unpredictable and each case varies greatly. Because of this there is no set formula that can be applied to enculturate all students to the school, so teachers and administration often have to problem solve as they go. Mr. Olson shares a unique example of this involving three homeless siblings new to the school. The three Somali siblings needed enculturation into school life, as well as English language instruction. They would not sit in classrooms, but rather ran through the school, head-butting and biting other children and teachers. The boys thought standing on top of the toilet seat was the appropriate way to urinate. This was obviously a complicated scenario and required more than one strategic approach. A picture book was created to introduce people in the school and elements of the school day to the boys. The book also contained pictures representing behavioral expectations and consequences. Mr. Olson shares,

> There was a picture of me, in my office, and an empty chair. If students act out, they have to come to sit in the chair to talk with Mr. Olson. I told them if you bite, you sit here. If you hit, you sit here. It was a tough start for these children and the others in their classrooms. The initial aim was to help these children learn what it was to be in school.

After several weeks using the picture book as a guide and many interactions with Mr. Olson, the boys found success in the school environment. Unfortunately, as is often the case, the family moved to a new apartment outside of the school's boundaries. Again the children were uprooted from the environment in which they had become comfortable to begin the process again. This is always of concern because, as Natalie indicated, "Continued change and instability impacts [students'] ability to connect with adults and can't establish long-term friendships with children."

In reference to the uniqueness of each situation Mr. Olson replies, "We are finding and creating case-by-case solutions." Natalie discusses the lack of routine with highly mobile students indicating, "It takes a lot of work to get new kids into a routine. It requires special help to accommodate them." Mr. Olson adds, "There is a need for enculturation into school for students. I wish there was a class that would help with social skill instruction—general practices, what school is like, how school works, behavior that's expected." There is no funding for such an orientation class, so the school tries to develop a variety of methods to meet incoming students transitional needs. One approach the school has embraced to assist in student acculturation is coaching fifth

grade leadership team members to act as guides and peer mentors for students new to the school. Mr. Olson feels that having an immediate peer connection is a key element of becoming comfortable in one's surroundings. While enculturation into the school is a long and difficult process, as Mr. Olson states, "If you can keep these kids for a year, you can help them."

In reference to the individuals she works with Natalie, the social worker states, "Our teachers are so loving, and embracing, and supportive and, knowing this will be hard, they are so kind and loving. They get it." While this loving kindness, and support are essential characteristics for teachers working the shelter children, Travis feels that there is an additional element that is essential. Discussing how he handled the rapid overturn of homeless students in his classroom he indicated, "The teachers who don't feel comfortable with plans being interrupted, day-planners that don't get signed, and homework that doesn't come back to school do struggle." He recognizes and accepts that there are larger issues facing these children and that punishing or shaming students for things that may be out of their control is counterproductive. If work isn't finished when they return to school he works to accomplish as much as they can during the school day.

Clearly understanding the importance of his relationship with students to student learning Travis states,

> Flexibility is a key word. For me, life goes on. I just try to make the most of their time in school. Reading and math scores aren't going to improve except in the classroom. You're not going to go anywhere with wishing for more. People are people.

He is confident that flexibility is what allows him to address unique needs and apply limitations to those accommodations as well. "I try to accommodate a child's need. If you are a little tired, tell me, and you can sleep in the nurse's office. But, if you are yelling in the classroom, that won't work here." Students have a clear understanding of Travis' expectations. They understand that flexibility will be granted for their learning and their needs, but disruption of the learning environment within the classroom is non-negotiable. As his principal, Mr. Olson states, "Travis is honest with kids. He doesn't just send kids to the office. He lets kids know he likes them but that expectations are expectations." As noted by Shepard and Boothe (2009), "Factors key to resilience are positive relationships, meaningful learning activities, and high expectations" (p. 14).

Teachers like Travis create an environment in which all students can feel accepted and welcome. This is especially important when homeless children often have such limited time at any one school. Often teachers return to school after a weekend and one of their homeless students will just be gone. No goodbyes, no picking up their belongings. Teachers and social workers now urge Family Shelter to help make goodbyes, when families move on, part of the experience.

> Think of a child just gone with no goodbye, can't take home their things from their lockers and artwork from the classroom. We ask Family Shelter, if they know, to let us know that a child will be leaving so that classmates can say goodbye and the child can have closure,

Natalie shares. While uncertainty, sadness, and fear may still be a part of the student's experiences, teachers and social workers at Red River Elementary hope the children can also experience the feelings that they matter to the school and classroom, that they were cared for, and that they will be missed.

As teacher-researchers, we gained experience that provides new knowledge and expands our human empathy. Our research left us with a plethora of ongoing questions. Though better

prepared to assist our Ed. 212 foundations students, we now wanted the local issue of education for the homeless to impact all teacher education majors at Plainsville College.

Relating to Teacher Education

A unique circumstance arose that allowed all education students at the college to critically engage. The Department of Education at Plainsville College designed a Vocation Retreat for education majors. The purpose of the retreat was to ask students to reflect upon their call to serve as teachers in a world where poverty, hunger, and homelessness are ever present.

The Vocation Retreat provided an opportunity for students to interact with individuals who are intensely involved with the homeless and hungry on a daily basis. Many individuals with a variety of roles at the college or in the community participated. Including the community development administrator, representatives from the food pantry, and a representative from the shelter. All participants in our research interviews generously agreed to a panel discussion. The campus pastor and faculty from various departments came to assist students in considering the issues surrounding homelessness through a variety of academic lenses.

The campus pastor opened the Retreat by asking students to list the characteristics making them a strong and vital person. The lists were shared amongst table groups providing the insight that all have the characteristics necessary to help and serve, although each individual's may take a unique shape and form. The pastor talked about calling—a spiritual, though not religious, sense of purposefulness in serving others through career. She reminded students that the qualities making them vital persons would contribute to their practice of teaching as a calling.

In addressing our students' assumptions, one presenter asked them to reflect on themselves at the age of the students they intend to teach, constructing a mental image of clothing, hairstyle, school participation, life outside of school, and family life. Partners shared their thoughts. Next, students formed mental images of the students they expect to teach. Again they discussed the pictures that came to mind. Lastly, students were asked to form a mental picture of homeless students. The question the presenter asked was: Did the students you expect to teach look a lot like you in your mind's eye? Chuckling could be heard as the majority of our students admitted that their image of the students they expect to teach was close to their images of themselves as children. The realization of their assumptions about what students would look or be like was a surprise to them. It was clear that many did not yet have a concept of how different from themselves their future students would be.

Over the course of the morning, numerous stories surrounding hunger and homelessness were shared with our students, further legitimizing the issues and providing perspectives from people in daily contact with diversity locally. Students heard the same rich and revealing stories we heard in our interviews. They critically engaged in the complexities of the often overwhelming issue of education for homeless children. We saw students' comprehension of how far reaching these issues are among our community's children develop through reflective discussions and the questions they raised for guest speakers.

The Vocation Retreat closed with discussion of what students learned, through the retreat, in teacher education courses, and through their personal experiences, that will serve in meeting the needs of homeless children and adolescents. In addition, our students discussed what they may need to reexamined in their beliefs, values, and intended practices in order to serve future students. The question remains in what ways do we need to further reeducate ourselves, based on assumptions held, and how will we proceed so as to continue to grow? Students left the retreat recognizing

that there is no single, fixed solution to the multiple issues surrounding education of the homeless. What is necessary is investment. Investment of time, energy, compassion, and creative problem solving. The investment of *more, more than any teacher is required to do as a public educator.*

The Vocation Retreat brought together professionals involved with the schools, the shelter, and food pantries and provided teacher education students insights into experiences, solutions, and further needs. These first steps on our part, as professors and as a department, will require further exploration and development. We recognize a gap that exists in our curriculum and we are working to address what our students need to become effective educators for all students regardless of circumstance.

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What Color is Your Hoodie? Essays on Black Gay Identity
By Jarrett Neal

Reviewed by Leslee Grey, Queens College, CUNY

Abstract

This review of What Color Is Your Hoodie? highlights the ways in which the essayist writes to make sense of the intersectionalities of his own identities and subjectivities. Neal's biographical vignettes serve as points of entry to discuss various social and cultural phenomena. The author weaves his personal stories into broad political analyses and social commentaries on a number of issues that are of interest to scholars of culture—in particular, race, class, masculinity, sexualities, bodies, and power.

Keywords: memoir, race, sexuality

Introduction

Essayist Jarrett Neal (2015) underscores the role that writing plays in understanding the complexities, precarities, and contradictions of identities and subjectivities in an uncertain world, what Bauman might refer to as "liquid life" (2005). "Writers write to make sense of the world," Neal explains. They "seek to map the complex psychic terrain of human experience, to make sense of a world that often makes no sense" (p. 77). Constructing stories can help individuals form connections between seemingly incongruent phenomena, creating meanings that make sense to the writer in light of the writer's prior understandings. Social and/or "identity" media platforms such as *Twitter*, *Facebook*, and *Tumblr* allow just about anyone with a mobile phone to inhabit the space of a writer, externalizing their inner psyches and joining a spectacle of endless discourse for millions to instantly consume (Debord, 2014). Just hours after Omar Mateen carried out his June 12, 2016 attack at a gay nightclub in Orlando, Florida, leaving 50 individuals dead and 50 more wounded, Donald Trump wrote via *Twitter*, "Appreciate the congrats for being right on radical Islamic terrorism." Implying that a tougher stance on immigration would have prevented this mass murder, Trump wrote nothing of reforming U.S. gun laws or attitudes of social tolerance toward those targeted in the attack. He merely used the attack to further an isolationist agenda. Fellow television star, conservative commentator, and Trump supporter Stacey Dash echoed Trump's self-congratulatory post on her own *Twitter* feed: "This atrocity would not go unanswered under President Trump," she wrote, supporting the candidate's position on constructing literal and figurative walls to keep individuals (mostly Mexican and Muslim) out of the U.S. Like Dash, whose family background is Mexican, Barbadian, and African American, the majority of the victims of Mateen's

nightclub attack were minorities, a point that serves to underscore the complexities that hide behind the easy shortcuts of identity categories and stereotypes—social divisions that rarely help individuals understand the interworkings and intersectionalities of ethnicity, race, class, gender, and sexuality. Dash's *Twitter* comment came just days after she suggested that transgender individuals should not be allowed to use public restrooms and should instead "go in the bushes," her reasoning being that "I'm not gonna put my child's life at risk because you want to change a law" to allow gender-free restrooms. However, current gun ownership laws that put *other* people's children at risk even in so-called "safe" spaces, from schools to LGBT nightclubs, did not provoke the same passionate response from these and other conservatives.

In his recently published collection of personal essays entitled *What Color Is Your Hoodie?* Jarrett Neal does what he says writers do: He writes to make sense of the intersectionalities of his own identities and subjectivities, mapping these intersectionalities onto his past experiences in order to make sense of the past and the present—"of a world that often makes no sense" (p. 77). Biographical themes found in these vignettes range from the author's budding sexuality as an eighth grader seeing a naked adult man for the first time, to Neal's circumcision at the age of 20 and a fairly randy analysis of interracial gay pornography. In most instances, Neal (re)constructs these vignettes to make sense of his own experiences, to connect his present subjectivities with a number of formative experiences from his past. For example, Neal describes accidentally glimpsing his coach's wet, muscular body in the school's locker room shower, explaining that it was "like watching one of my action figures come to life" (p. 12). Here he uses this childhood memory to explore his adulthood fascination with perfecting his own physique through bodybuilding, which he writes about with some detail. In other instances, Neal employs the tools of the comic, sometimes generalizing his experiences to *all* men who are gay and/or black for the sake of humor. For example, the author credits the "blatant homoerotic imagery" found in Mattel's *He-Man and the Masters of the Universe* for "captivating an entire generation of gay men" with a "half-naked bronzed barbarian" (p. 12).

The author's personal vignettes serve as points of entry to explore various social and cultural phenomena, as he weaves the narratives into broad political analyses and social commentaries on a number of issues that are of interest to scholars of culture—in particular, issues surrounding race, class, masculinity, bodies, and power. In these instances, Neal reveals a number of contradictions that tend to arise when writers struggle to make sense of precarious lives. While Neal, a self-proclaimed nerd, explains how he used his academic skills to learn as much as he could about fitness in order to perfect his body, he acknowledges, but does not go so far as to explicitly critique, the ways in which such rigid standards of beauty are socially, racially, economically, and politically constructed. Though he admits the dangers involved in the health and beauty industries that perpetuate cultural stereotypes and consumerism, Neal posits that beauty, like writing, should be understood as "an artistic project, a craft of aesthetic possibilities, a form of resistance" (p. 41). Neal's poetic musing, "To be beautiful, after all, is to be truly seen" (p. 42), makes his assertion that all black men inevitably confront the hyper-masculine, sexualized stereotype of the Mandingo seem all the more pointed.

It is in such instances that Neal acknowledges the contradictions that are uncovered by attempts to "make sense" of complex experiences: The Mandingo archetype is "forged out of a racist past yet perpetuated by a masculine desire to attain alpha male status, to be cock of the walk" (p. 31). While the author implicitly critiques the social conditioning that requires black men to perform a sure-footed "cock of the walk" identity, Neal laments that then-President Obama "refuses to crow about his successes." In a chapter particularly relevant in light of the 2016 election,

Neal professes his "love affair" with Obama's "brainy coolness," even though the author ultimately criticizes Obama's steady demeanor. Neal explains that during his presidency, Bill Clinton often expressed anger when addressing his critics; however, because "black men are stereotyped as violent brutes, angry, always out to steal from and harm every white person they see," Obama chose to keep cool. Neal suggests that it was Obama's silent "high-minded attitude" that enabled members of the radical right (p. 60) to construct and perpetuate a number of false narratives about his nationality, religion, and even his sexuality. Indeed, in the days following the aforementioned Orlando nightclub attack, Donald Trump implied that President Obama was directly responsible for the murders.

Neal also reflects on the contradictions that emerge as he navigates social expectations and stereotypes in his own public persona as a teacher. In the essay entitled "Teaching Black, Living Gay," the author addresses his current professional life as a university writing instructor. Neal explains that while he requires students to read works by LGBT authors in his classes, he prefers not to tell his students that he is gay. "If my students knew," he explains, "suddenly their focus wouldn't be on their studies; rather, they'd spend all class period thinking about me sucking dick" (p. 85).

Neal's essays underscore the fact that despite gains made over the last several decades in educational attainment, political power, and visibility in film, television, and other popular media, black men are still more likely than white men to be negatively stereotyped, incarcerated, and unemployed. In fact, Neal posits, "black men are falling farther and farther behind all other groups of men" *except* in one arena, that of sexual desirability (p. 32): "Everyone, it seems, wants a big black dick" (p. 31). Indeed, the "black dick" tends to play a prominent role throughout this collection. In the chapter entitled "Peewee's Peepee," Neal maps an analysis of American exceptionalism, cultural expectations of circumcision, and popular culture's fascination with penises with his own experience of having his foreskin surgically removed at the age of 20. It is no coincidence, the author suggests, that he elected to have the surgery the same year that he failed out of college *and* came out to his family: "Perhaps it has always been about my body, this restlessness within me" (p. 150). The circumcision, Neal explains, "was my first step toward self-acceptance…a way of wrestling control of my identity, body, sexuality, and destiny from my community, and the culture" (p. 149). Even as he acknowledges extant debates over the cultural practice of circumcision, including the loss of sensitivity the procedure brings, Neal concedes that he would still elect to have a son circumcised at birth in order to conform to dominant American values.

Readers accustomed to scholarly treatments of studies of culture might find themselves looking for "evidence" for some of the connections and conclusions that the author makes. For example, in his discussion of *He-Man and the Masters of the Universe*, Neal suggests that because male role models were scarce in his community growing up, "Our mothers, almost in desperation, relied on He-Man among other superheroes and action film stars, toys and games…to fill the void left by our absent fathers" (p. 13). While a scholarly project might provide insights from oral history interviews with the neighborhood mothers, for example, to show the reasoning behind this argument, Neal's is not that kind of book. However, traces of scholarly conversations can be found in the author's analyses (bell hooks and Cornel West are explicitly referenced).

Neal's perspective reveals several contradictions and compromises made every day, which serve to maintain the status quo of societal structures. The collection will be of interest to readers concerned with race, gender, sexuality, queer studies, and perhaps most significantly, the subject of intersectionality: While black men bring billions of dollars each year to the music and sports

industries, the author asks, "does anyone care if the running back is only semi-literate?" (p. 42) Ultimately, Neal concedes that "every success, no matter how small, must be celebrated" (p. 73).

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Elite Schools: Multiple Geographies of Privilege
Edited by Aaron Koh & Jane Kenway

Reviewed by Burke Scarbrough, University of Minnesota Duluth

Abstract

This review of Elite Schools: Multiple Geographies of Privilege discusses how Aaron Koh and Jane Kenway's edited collection contributes to the study of privilege by applying a spatial lens to the study of elite schools. The book articulates a powerful challenge for scholars to analyze the multiple and overlapping scales on which elite schools are always defining themselves, and the thirteen chapters that follow offer geographically grounded insights about how privilege works in diverse educational spaces. The studies in this book help to make concrete the work that students and schools do to locate themselves locally, nationally, transnationally, and globally.

Keywords: privilege, elite schools, spatial analysis, sociology of education

For many educational researchers, an agenda to seek equity involves focusing research energy and resources on historically marginalized youth, along with the educators, institutions, and policies that impact them. But can a critical analysis of disadvantage be complete without a complementary understanding of educational advantage? Laura Nader (1972) raised this question in her influential call for anthropologists to "study up" the social hierarchy, and more recent work (Stich & Colyar, 2013) has re-affirmed the importance of studying social class relationally—understanding that "the accumulation of privilege is implicated in the deepening of poverty" (Weis & Fine, 2012, p. 177) and that research illuminating mechanisms of educational advantage is an important part of an agenda to dismantle educational disadvantage.

A large body of work has taken up that call, some of it under the banner of "the new sociology of elite education" (Howard & Gaztambide-Fernández, 2011). Recent studies of elite schools include analyses of what sorts of resources and practices are available to the admitted few, how those few make sense of their advantages and of why other people don't have them, and how race and gender mediate different students' experience of elite schools. As this literature has grown, perhaps no one has been more active in pushing for richer understandings and new analytic directions than Aaron Koh and Jane Kenway. In 2015 alone, they co-edited a special issue of the *British Journal of Sociology of Education* focused on fresh perspectives and under-examined research sites, and Kenway worked with Adam Howard to co-edit a special issue of the *International*

Journal of Qualitative Studies in Education focused on methodological challenges and possibilities in research on elites.

In that editorial work, and in their own empirical studies, Koh and Kenway focus on bringing to light how privilege and elite education work differently in different local and national settings, but also how they respond to similar transnational and global forces shaping our social world. Their new edited collection, *Elite Schools:Multiple Geographies of Privilege*, recognizes that "privilege arises in different spaces and places and on various scales" (p. 2), and the book seeks to navigate these overlapping spaces. A spatial view of privilege understands elite schools to be actively producing themselves as certain kinds of places, and charges researchers to analyze how they are pulling it off—particularly given that space is always contingent and contested, and could have been produced differently than it has been. As contributor Howard Prosser argues in the book's final chapter, it is to the advantage of elite schools if the rest of us treat their eliteness as something that just "is"; by understanding eliteness as something produced and reinforced historically, and at enormous cost to others, a careful researcher can avoid conceding a school's elite status and instead interrogate the processes through which that status is produced—indeed, bought and sold.

But analyzing how eliteness is produced, and how those processes vary within a given school and also across schools, and how elite schools are locally embedded but also nationally embedded but also globally shaped, and how they occupy physical and virtual space, and how they are historically produced but also produce history, and how the advantages they confer are ideological and social and also material…this is a lot to pursue, the sort of thing that is easy for editors to call for and harder for empirical studies to analyze with clarity and rigor. Still, this theoretical richness is the hallmark of a vibrant literature in development, and the thirteen chapters of *Elite Schools* charge right in.

Perhaps the strongest impression a reader might get from the collection as a whole is of the tensions and dialectics through which elite schools produce themselves. Many chapters abound with accounts of hybrid identities and ideological balancing acts, all of which complicate easier or more static notions of what it means to be (and attend) an elite school. Wee Loon Yeo's chapter traces how Asian males at an Australian boarding school draw on norms from both home and school to construct particular notions of masculinity. A chapter by Moosung Lee and colleagues, and another by Chin Eh Loh, examine the tensions within Asian International Baccalaureate (IB) schools to groom future international business leaders while also adhering to the IB's curricular emphasis on open-mindedness and service. And chapters by Radha Iyer and Caroline Bertron consider in quite different ways how particular schools position themselves vis-à-vis well known international networks of elite schools; some find it to their benefit to align themselves with larger networks of exclusive schools, while others find it useful to distance themselves from such networks. Indeed, several chapters describe schools from different parts of the world all hard at work constructing themselves as deeply embedded local or national institutions while also recruiting and shaping global leaders. In the broadest sense, it is probably not surprising that schools try to market both a local identity and a transnational identity. The power of those chapters is in beginning to illuminate the discourses that make space for all of these multi-scalar identities.

In some cases, the chapters in *Elite Schools* take influential concepts in the study of privilege and apply them to settings that are underrepresented in the literature, as so much sociology of elite education has focused on schools in the United States and the United Kingdom. For instance, Gaztambide-Fernández's (2009) heuristic for what makes an elite boarding school—based on a study of U.S. schools—is cited in several chapters, giving those authors a foothold to establish

schools in Australia, China, and India as "elite" amid all of the geographic contingencies that can complicate such characterizations.

Other chapters deepen our understanding of well-worn sociological concepts by grounding them in places and social ecologies. A common refrain in literature about elite schools is that students at such schools develop valuable social networks that confer advantages on them throughout their lives. This claim about social capital is often more theoretical than empirical, but Shane Watters traces the existence of actual "old boy" alumni networks in elite British schools and describes the sorts of networking and career services that those networks provide. Another refrain about elite schools is that they develop well-rounded cosmopolitan "cultural omnivores" who are at ease in a broad range of cultural settings (Khan, 2011). Yujia Wang revisits the concept of "well-roundedness" through the eyes of Chinese students attending an elite Australian school, some of whom find themselves marginalized as they discover the practices that count (and don't count) for being "well-rounded" in that setting; as these youth reveal how some sports are celebrated more than others and artistic endeavor is only valued when it leads to performance and competition, they show us the culturally contingent nature of "well roundedness," opening up for critique a term that many elite schools construct as self-evidently good.

Like most good edited books, *Elite Schools* gains its strength from making available these sorts of connections across chapters. Individually, several of the chapters make their major claims on the strength of a handful of interviews or a few passages or images on school web pages, and it remains for future research to confirm and/or elaborate the theoretical gestures these brief chapters provide. The chapters also vary considerably in how—and how much—their analytic approach is recognizably spatial. In this, I would argue, they are in good company; nuanced spatial analysis is still a vanguard in education research, and a research community inches forward by offering each other just such disparate examples. But most importantly, this collection's spatial grounding and its contributors' geographic diversity successfully forecloses pat conclusions about how privilege works. Koh and Kenway are at their best for this field when they resist any emerging consensus and ask an ever more challenging set of questions about how educational (dis)advantage is being constructed around the world.

In this spirit of raising ever more questions, I feel compelled to add a brief coda. 2016 was a fascinating year in which to read about the "elite," particularly while living in the United States. I write just weeks after a billionaire real estate developer and television star (and elite university graduate) was elected President following a campaign that harnessed—among other things—populist scorn against political "elites" and relentless deflection of fact-checking as the work of partisan media "elites." Criticizing the powerful for political gain is certainly nothing new, and there might be nothing about this political moment that is inconsistent with the major forces of inequality and power that educational researchers are tracing. Nevertheless, Koh and Kenway remind us that a spatial analysis of privilege brings to light the inherently "contested geographies of wealth, privilege, and exclusion" (Pow, as cited in Koh & Kenway, 2016, p. 4). From important lines of scholarly critique in works such as *Elite Schools* to the populist political moment currently unfolding across several spaces, there is much to learn about how privilege is being not just produced but contested, and in what forms, and in whose interests.

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