# CCT Definitions

1. **Understanding Cultural Capital Themes in Higher Education: A Focus on Reflective Journaling**
2. **Cultivating Cultural Capitals in Introductory Algebra-Based Physics through Reflective Journaling**
3. **Whose Culture Has Capital? A Critical Race Theory Discussion of Community Cultural Wealth** by Tara J. Yosso

# Aspirational Capital

Aspirational capital refers to the ability to maintain hopes and dreams for the future, even in the face of real and perceived barriers. This resiliency is evidenced in those who allow themselves and their children to dream of possibilities beyond their present circumstances, often without the objective means to attain those goals. This form of cultural wealth draws on the work of Patricia Gándara (1982, 1995) and others who have shown that Chicanas/os experience the lowest educational outcomes compared to every other group in the US, but maintain consistently high aspirations for their children’s future (Delgado-Gaitan, 1992, 1994; Solórzano, 1992; Auerbach, 2001). These stories nurture a culture of possibility as they represent ‘the creation of a history that would break the links between parents’ current occupational status and their children’s future academic attainment’ (Gándara, 1995, p. 55).

* "The cultural capitals such as aspirational capital are part of the six forms of capital proposed in the community cultural wealth model by Yosso." (Section II, Related Work & Background)
* "Aspirational capital can be defined as the ability to maintain hopes and dreams for the future, even in the face of real and perceived barriers." (Section II, Related Work & Background)

# Attainment Capital

* "Attainment describes more tangible short or long-term goals, for example, obtaining a college degree or envisioning specific educational or career goals, such as becoming a physician, surgeon, physical therapist, or Ph.D.-level researcher." (Section III, Part A)
* "Attainment capital involves describing the necessary steps and actions in achieving goals, often overlapping with navigational capital." (Section III, Part E)
* "Attainment capital often intersects with other forms of cultural capitals, such as aspirational, navigational, and familial capitals." (Section III, Part E)
* "Students who express attainment capital frequently outline clear educational and career objectives they aim to accomplish." (Section III, Part E)
* "Attainment: mention of tangible goal(s) (i.e., something that could be added to a CV or resume)." (Section I, Introduction)
* "Attainment CCT refers to explicit references of career or educational goals, such as obtaining a degree in Biology or becoming a cardiothoracic surgeon." (Section III, TACCTI)
* "The base model for Attainment CCT classification was built early on using features such as unigrams, POS tags, and sentiment polarity to detect sentences that reflect career or educational goals." (Section III-B1, Base Model)
* "Attainment classification models are tasked with identifying explicit mentions of goals that signify tangible achievements, which students could showcase in their academic or professional pursuits." (Section III-B, Classification Models: Attainment CCT Identification)
* "Examples of sentences indicating Attainment CCT include mentions of pursuing specific professions, preparing for certain career paths, or acquiring degrees or certifications." (Section VI, Discussion)

# Navigational Capital

Navigational capital refers to skills of maneuvering through social institutions. Historically, this infers the ability to maneuver through institutions not created with Communities of Color in mind. For example, strategies to navigate through racially hostile university campuses draw on the concept of academic invulnerability, or students’ ability to ‘sustain high levels of achievement, despite the presence of stressful events and conditions that place them at risk of doing poorly at school and, ultimately, dropping out of school’ (Alva, 1991, p. 19; see also Allen & Solórzano, 2000; Solórzano et al., 2000; Auerbach, 2001). Scholars have examined individual, family and community factors that support Mexican American students’ academic invulnerability—their successful navigation through the educational system (Arrellano & Padilla, 1996). In addition, resilience has been recognized as ‘a set of inner resources, social competencies and cultural strategies that permit individuals to not only survive, recover, or even thrive after stressful events, but also to draw from the experience to enhance subsequent functioning’ (Stanton-Salazar & Spina, 2000, p. 229). Indeed, People of Color draw on various social and psychological ‘critical navigational skills’ (Solórzano & Villalpando, 1998) to maneuver through structures of inequality permeated by racism (see Pierce, 1974, 1989, 1995). Navigational capital thus acknowledges individual agency within institutional constraints, but it also connects to social networks that facilitate community navigation through places and spaces including schools, the job market and the health care and judicial systems (Williams, 1997).

* "Navigational capital can be defined as skills or knowledge students use to strategize paths through higher education institutions." (Section III, Part B)
* "Navigational capital includes illustrating awareness of steps required to obtain a degree or using resources like SI (Supplemental Instruction) to aid in success." (Section III, Part B)
* "Navigational capital is evident when students recognize SI as a resource available to them that will aid in their success." (Section III, Part B)
* "Examples include connecting past, present, and future paths, such as utilizing the Supplemental Instruction program to get closer to a goal of getting a degree." (Section III, Part B)
* "Navigational capital often involves recognizing various steps and utilizing available resources and strategies within educational settings to achieve goals." (Section III, Part B)
* "Students who possess navigational capital can maneuver through institutional settings effectively by leveraging available supports." (Section III, Part B)
* "Navigational capital is one of the six forms of cultural capital introduced in the community cultural wealth model, defined as skills and strategies students use to navigate through higher education." (Section II, Related Work & Background)
* "Navigational capital enables students to maneuver through social institutions, including educational systems that were not built with them in mind." (Section II, Related Work & Background)
* "Navigational capital is evident when students reflect on their strategies to overcome institutional barriers or leverage resources like mentoring programs to achieve their educational goals." (Section II, Related Work & Background)

# Perseverant Capital

* "Perseverant capital describes experiences in the past or anticipation of future struggles and challenges that enable students to endure and succeed through adversity." (Section III, Part B)
* "Perseverant capital involves determination, resilience, and inner confidence that help students embrace struggles and persist through them." (Section III, Part B)
* "Perseverant capital is expressed when students highlight struggles in STEM and are determined and self-reliant in overcoming adversities." (Section III, Part B)
* "Perseverant capital can overlap with other forms of capital, such as navigational and attainment capitals, when describing persistence through adversities." (Section III, Part E)
* "Students with perseverant capital demonstrate tenacity in facing obstacles and a readiness to address future challenges." (Section III, Part B)

* "Perseverant capital describes experiences that build resilience, determination, and inner confidence to persist through adversity." (Section II, Related Work & Background)
* "Perseverant capital is demonstrated when students articulate their commitment to succeed despite facing challenges or obstacles in their educational journey." (Section II, Related Work & Background)
* "Examples include narratives where students discuss dealing with hardships and still maintaining a focus on their long-term academic and career goals." (Section II, Related Work & Background)

# **Resistance Capital**

Resistant capital refers those knowledges and skills fostered through oppositional behavior that challenges inequality. This form of cultural wealth is grounded in the legacy of resistance to subordination exhibited by Communities of Color. Furthermore, maintaining and passing on the multiple dimensions of community cultural wealth is also part of the knowledge base of resistant capital. For example, even from within internment camps, Japanese communities resisted racism by maintaining and nurturing various forms of cultural wealth. Extending on this history, Tracy Robinson and Janie Ward’s Cultural capital and critical race theory 81 (1991) research shows a group of African American mothers who consciously raise their daughters as ‘resistors’. Through verbal and nonverbal lessons, these Black mothers teach their daughters to assert themselves as intelligent, beautiful, strong and worthy of respect to resist the barrage of societal messages devaluing Blackness and belittling Black women (Ward, 1996). Similarly, Sofia Villenas and Melissa Moreno (2001) discuss the contradictions Latina mothers face as they try to teach their daughters to value themselves and be self-reliant within structures of inequality such as racism, capitalism and patriarchy. In each of these research studies, Parents of Color are consciously instructing their children to engage in behaviors and maintain attitudes that challenge the status quo. These young women are learning to be oppositional with their bodies, minds and spirits in the face of race, gender and class inequality. In analyzing students’ historical and contemporary efforts to transform unequal conditions in urban high schools, Daniel Solórzano and Dolores Delgado Bernal (2001) reveal that resistance may include different forms of oppositional behavior, such as self-defeating or conformist strategies that feed back into the system of subordination. However, when informed by a Freirean critical consciousness (1970), or recognition of the structural nature of oppression and the motivation to work toward social and racial justice, resistance takes on a transformative form (see Solórzano & Yosso, 2002b). Therefore, transformative resistant capital includes cultural knowledge of the structures of racism and motivation to transform such oppressive structures (Pizarro, 1998; Villenas & Deyhle, 1999).

* "Resistance capital refers to recognizing systemic oppression that creates social and institutional barriers and being empowered to make change so that higher education is more accessible." (Section III, Part B)
* "Resistance capital involves challenging common stereotypes about race and gender in STEM." (Section III, Part B)
* "Resistance capital is seen when students reject oppressive values and stereotypes built through experiences of micro- and macro aggressions." (Section III, Part B)
* "Students expressing resistance capital are often driven by the desire to challenge and change inequitable structures and policies in education." (Section III, Part B)
* "Resistance capital involves challenging the inequalities and injustices faced by underrepresented students in educational institutions." (Section II, Related Work & Background)
* "Students expressing resistance capital are often engaged in actions or narratives that resist oppressive systems and practices in academia." (Section II, Related Work & Background)
* "Resistance capital is crucial for students who feel marginalized; it empowers them to use their experiences and insights to challenge and change the status quo." (Section II, Related Work & Background)

# Familial Capital

Familial capital refers to those cultural knowledges nurtured among Familia (kin) that carry a sense of community history, memory and cultural intuition (see Delgado Bernal, 1998, 2002). This form of cultural wealth engages a commitment to community well-being and expands the concept of family to include a broader understanding of kinship. Acknowledging the racialized, classed and metrosexualized inferences that comprise traditional understandings of ‘family’, familial capital is nurtured by our ‘extended family’, which may include immediate family (living or long passed on) as well as aunts, uncles, grandparents and friends who we might consider part of our Familia. From these kinship ties, we learn the importance of maintaining a healthy connection to our community and its resources. Our kin also model lessons of caring, coping and providing (education), which inform our emotional, moral, educational and occupational consciousness (Reese, 1992; Auerbach, 2001, 2004; Elenes et al., 2001; Lopez, 2003). This consciousness can be fostered within and between families, as well as through sports, school, religious gatherings and other social community settings. Isolation is minimized as families ‘become connected with others around common issues’ and realize they are ‘not alone in dealing with their problems’ (Delgado-Gaitan, 2001, p. 54). Familial capital is informed by the work of scholars who have addressed the communal bonds within African American communities (Foley, 1997; Morris, 1999), the funds of knowledge within Mexican American communities (Moll et al., 1992; Vélez-Ibáñez & Greenberg, 1992; Gonzalez et al., 1995; Olmedo, 1997; Rueda et al., 2004) and pedagogies of the home that Students of Color bring with them to the classroom setting (Delgado Bernal, 2002).

* "Familial capital includes support students receive from their families, whether material, emotional, or other resources, such as role modeling." (Section III, Part C)
* "Familial capital is nurtured by family support that carries a sense of family history, memory, and cultural intuition." (Section III, Part C)
* "Familial capital involves support provided by family, whether material (e.g., food, financial), emotional support, or role modeling." (Section III, Part C)
* "Students with familial capital often draw strength from their family ties and the values instilled by their families." (Section III, Part C)
* "Familial: mention of support provided by family, whether tangible support (e.g., food, financial support), emotional support, or role modeling." (Section I, Introduction)
* "Familial capital is nurtured within a student's immediate and extended family networks, emphasizing the importance of kinship and collective support." (Section II, Related Work & Background)
* "Familial capital is evident in students’ reflections when they attribute their success or persistence in education to their family members’ support and guidance." (Section II, Related Work & Background)

# Filial Piety Capital

* "Filial piety describes students’ sense of responsibility to their families and often serves as a source of inspiration for furthering their educational goals." (Section III, Part C)
* "Filial piety is rooted in the struggles and challenges that students know their families face, and therefore have the desire to be successful for them." (Section III, Part C)
* "Students expressing filial piety capital often see their educational pursuits as a way to honor and support their family." (Section III, Part C)
* "Filial piety capital involves a sense of responsibility to one's family, often serving as an inspiration for educational goals." (Section II, Related Work & Background)
* "Students expressing filial piety capital are motivated to succeed academically to honor and provide for their family members." (Section II, Related Work & Background)
* "This form of capital is particularly evident in reflections where students talk about fulfilling their parents’ dreams or expectations through their educational achievements." (Section II, Related Work & Background)

# First-Generation Capital

* "First-generation capital involves students' explicit identification as being the first in their family to attend college, which serves as an asset and motivator." (Section III, Part C)
* "First-generation capital highlights the unique experiences and challenges faced by students who are the first in their families to pursue higher education." (Section III, Part C)
* "First Generation: mention of being the first in their family to attend college." (Section I, Introduction)
* "Identifying instances of First Generation CCT is relatively straightforward because students often explicitly state their first-generation college status in their reflections." (Section III-C, Classification Models: First Generation CCT Identification)
* "First-generation capital reflects the unique challenges faced by students who do not have familial experience or guidance on navigating higher education." (Section II, Related Work & Background)

# Social Capital

Social capital can be understood as networks of people and community resources. These peer and other social contacts can provide both instrumental and emotional support to navigate through society’s institutions (see Gilbert, 1982; Stanton-Salazar, 2001). For example, drawing on social contacts and community resources may help a student identify and attain a college scholarship. These networks may help a student in preparing the scholarship application itself, while also reassuring the student emotionally that she/he is not alone in the process of pursuing higher education. Scholars note that historically, People of Color have utilized their social capital to attain education, legal justice, employment and health care. In turn, these Communities of Color gave the information and resources they gained through these institutions back to their social networks. Mutualistas or mutual aid societies are an example of how historically, immigrants to the US and indeed, African Americans even while enslaved, created and maintained social networks (Gómez-Quiñones, 1973, 1994; Gutman, 1976; Sanchez, 1993; Stevenson, 1996). This tradition of ‘lifting as we climb’ has remained the motto of the National Association of Colored Women’s Clubs since their organization in 1896 (see Gurnier, Fine & Balin, 1997, p. 167). Concha Delgado-Gaitan’s (2001) ethnographic research with the Mexican immigrant community of Carpinteria, California further confirms that ‘Families transcend the adversity in their daily lives by uniting with supportive social networks’ (p. 105).

* "Social capital describes the utilization of friends, social networks, and peer interactions to gather insight and information." (Section III, Part D)
* "Social capital involves recognizing diverse perspectives when learning new materials and seeking to cultivate networks of peers." (Section III, Part D)
* "Students describe the desire to form study groups, opportunities to build new connections, be friends with others on similar paths, and cultivate relationships with instructors to learn and gain advice." (Section III, Part D)
* "Students with social capital leverage relationships and community networks to navigate educational environments effectively." (Section III, Part D)
* "Social capital describes the utilization of friends, social networks, and peer interactions to gather insight and information." (Section I, Introduction)
* "Social capital is manifested in students’ reflections when they discuss forming study groups, building connections with peers and instructors, or leveraging social networks for academic and career advancement." (Section II, Related Work & Background)
* "Social capital can be an asset in collaborative learning environments where students share their insights, resources, and strategies with their peers." (Section II, Related Work & Background)

# Community Consciousness Capital

* "Community consciousness capital involves students sharing stories about their membership to a specific community in hopes of giving back." (Section III, Part D)
* "Community consciousness is often seen when students recognize that their struggles may be similar to those within their communities and want to be part of the solution to uplift themselves and others around them." (Section III, Part D)
* "Students with community consciousness capital feel a strong connection to their communities and are motivated to contribute positively to them." (Section III, Part D)
* "Community Consciousness: mention of solidarity with community and the desire to give back to a community one identifies as being part of." (Section I, Introduction)
* "Community consciousness capital involves recognizing the importance of supporting one’s community, often reflecting a desire to contribute positively to the community’s growth or wellbeing." (Section II, Related Work & Background)
* "This form of capital is evident when students express motivations that go beyond personal success and aim to uplift others within their community." (Section II, Related Work & Background)

# Spiritual Capital

* "Spiritual capital not only encompasses students’ faith or religion, but also gratitude, compassion, and humanitarianism as resources for hope and important motivators for students’ journeys through college and life." (Section III, Part D)
* "Spiritual capital involves a central role of wanting to help others and make a positive difference in the world in general." (Section III, Part D)
* "Students who express spiritual capital often reflect on their spiritual beliefs as a source of motivation and guidance in their educational pursuits." (Section III, Part D)
* "Spiritual capital encompasses faith, gratitude, compassion, and humanitarianism as resources for hope and important motivators for students’ journeys through college and life." (Section I, Introduction)
* "Spiritual capital is demonstrated when students draw on their spiritual beliefs or practices as sources of strength, motivation, and guidance in their educational pursuits." (Section II, Related Work & Background)
* "Examples include reflections on faith or the desire to make a positive difference in the world through acts of kindness, service, or dedication to a higher purpose." (Section II, Related Work & Background)

# Linguistic Capital

Linguistic capital includes the intellectual and social skills attained through communication experiences in more than one language and/or style (see Faulstich Orellana, 2003).4 This aspect of cultural wealth learns from over 35 years of research about the value of bilingual education and emphasizes the connections between racialized cultural history and language (Cummins, 1986; Anzaldúa, 1987; Darder, 1991; García & Baker, 1995; Gutierrez et al., 1995; Macedo & Bartolomé, 1999; Gutierrez, 2002). Linguistic capital reflects the idea that Students of Color arrive at school with multiple language and communication skills. In addition, these children most often have been engaged participants in a storytelling tradition, that may include listening to and recounting oral histories, 3. 4. Cultural capital and critical race theory 79 parables, stories (cuentos) and proverbs (dichos). This repertoire of storytelling skills may include memorization, attention to detail, dramatic pauses, comedic timing, facial affect, vocal tone, volume, rhythm and rhyme. Linguistic capital also refers to the ability to communicate via visual art, music or poetry.5 Just as students may utilize different vocal registers to whisper, whistle or sing, they must often develop and draw on various language registers, or styles, to communicate with different audiences. For example, Marjorie Faulstich Orellana (2003) examines bilingual children who are often called upon to translate for their parents or other adults and finds that these youth gain multiple social tools of ‘vocabulary, audience awareness, cross-cultural awareness, “real-world” literacy skills, math skills, metalinguistic awareness, teaching and tutoring skills, civic and familial responsibility, [and] social maturity’.