Teachers as Agents of Cultural Capital Formation

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abstract: This case study examines the role teachers can play as protective agents in the formation of cultural capital. The study followed classroom teachers and midlevel central office educators as they introduced static and relational cultural capital to minoritized and low-socioeconomic-background high school students. Findings show that in practice both forms of cultural capital function simultaneously. Also, this student population benefits from systemic, consistent, and intentional cultural capital formation, especially when this is nested in a set of structures of care.

The Focal Issue

This study attempts to understand the role of teachers as agents engendering cultural capital among Latinx and African American high school students from low socioeconomic backgrounds. We pursued this issue as a way to dig out from our data sets any potential responses to the traditional reproductive functions of schooling, where the credo "pulling oneself up by one's own bootstraps"—co-opted from Joyce's (2013) statement "There were others who had forced their way to the top from the lowest rung by the aid of their bootstraps" (p. 470)—sits central.

Meritocracy, indeed, wants us to believe that if one works hard enough in school, that one's life prospects can improve, and one can enjoy a better future than the previous generation. We know, nevertheless, that this ideology does not deliver its promises due, in substantial part, to social injustice and cultural disparities. What may deliver is teachers' actions. School systems, and teachers as their most important labor force, embody a latent power for leveling the playing field.

Researchers such as Amrein-Beardsley (2012), Boyd, Grossman, Lankford, Loeb, & Wyckoff (2006), Darling-Hammond (2006, 2015), and Kunter & Baumert (2013) have profusely documented the powerful role of teachers' quality in students' learning experience. Teacher' quality consists of the skill set, formal education, experience, and dispositions an individual brings to bear in the classroom.

Quality establishes the professional capital a teacher possesses. Aiding students to deal successfully with economic imperatives is one way such capital may work. Robeyns (2006) suggests that "the instrumental personal economic role of education is that it can help a person find a job, to be less vulnerable on the labour market, to be better informed as a consumer, to be more able to find information on economic opportunities, and so forth" (p. 3).

This argument promotes student academic achievement as a means for individual economic viability inherently linked to the nation's economy. In the words of Best (2010), students "must strive to develop talent that will contribute to our nation's economy" (p. 1). While we do agree that education, income, and the economy are intimately tied, we wanted to explore another way of teachers applying their professional capital—the cultural side. Central to the purposes of this study are the prevalent massive economic disparities. We wanted to examine the cultural, noneconomic functions of schooling, more in the sense of Tan's (2014) and Choo's (2018) human capabilities approach, which promotes a noninstrumental and more holistic understanding of personal evolution.

Apple (2004) suggested that the implicit function of schools includes normalizing the "cultural and economic values and dispositions" (p. 59) of the dominant class. Schools, the author argues further, serve as a conduit to disseminate and reinforce middle- and upper-class values through implicit and explicit codes. Earlier, Delpit (1988) had argued that a "culture of power" (p. 283), nurtured in and facilitated by schools, frames the context in which children and youth view the world and defines the norms by which others are judged. These codes may include forms of speech, ways of dressing, writing styles, social interactions, and access to meaningful curriculum in schools, all of which Bourdieu (1986) defined as cultural capital (Duckor & Perlstein, 2014; Ladson-Billings, 2014; Meier, 19985; Sizer, 1996; York, Gibson, & Rankin, 201).

African American and Latinx students, who disproportionately come from lower economic communities, may not learn, in Delpit's (1988) view, the decoding skills and understanding of how power works. This condition leads them to the inevitability of a diminished future. Perhaps no other schooling area shows this issue more dramatically than the science, technology, engineering, and mathematics (STEM) fields.

Studies such as those of Brown & Campbell (2008), Klopfenstein (2004), Ndura, Robinson, & Ochs (2003), and Lichten (2007) have abundantly shown that low enrollment of Latinx, African American, Native American, and Southeast Asian American students in the STEM fields through advanced placement (AP) coursework remains a serious challenge for high schools across the United States. Kendricks and Arment (2011) found that freshman STEM majors made up 21.5% of all college freshmen in 2006. Of this STEM group, about 20% (one out of every five) were African Americans. Kendricks & Arment (2011) nonetheless found that out of this 20% group, a small proportion of 7% to 8% attained a STEM bachelor's degree.

The dramatically low Latinx and African American enrollment in STEM fields is caused by multiple variables, from limited parental involvement in the school affairs of children to the perversity of tracking. In their work on tracking, Archbald, Glutting, & Qian (2009) found that this subtle and pervasive practice ends up depriving this student population of cultural capital. The authors, as well as the earlier work of Rosenbaum, Miller, & Krei (1996) and of Flowers (2008), have found that teachers and counselors manifestly express expectations that discourage these students from placement in college preparatory or honors-level courses. Such expectations include negative judgment about ethnicity, socioeconomic status, and personality traits, none of which contain academic criteria.

Our literate and certification-oriented society weighs in heavily on schools. These social spaces trade intensely in cultural capital on daily basis. Bourdieu and Passeron (1990) argued that the distribution of titles and degrees serves "to stamp pre-existing differences in inherited cultural capital with [a] meritocratic seal of academic consecration" (p. ix). The authors further argued that "the arbitrariness of the distribution of powers and privileges" prevalent in society "perpetuates itself though the socially uneven allocation of school titles and degrees" (p. x). As we have described in the previous section, this reproductive cycle leaves significant numbers of minoritized students out of the prestigious degrees in the science, technology, engineering, and mathematics fields.

At the core of cultural capital resides Bourdieu's (1986) notion of habitus. According to the author, habitus exists in the body of a society and in the physical bodies of individuals. It manifests in daily practice through the ways a person walks, talks, and even thinks and articulates emotions. Moreover, habitus mediates individuals' relations with the dominant culture (Bourdieu, 1984) and with power structures. Yet schools, generally speaking, tend to deprive minoritized children and youth of what Dumais (2005) describes as the "attitudes, references, formal knowledge, behaviors" (p. 84) that prevail in society's centers of power. Once access is systemically curtailed, chances of attaining those titles and diplomas appear poor for this population, and projections of social mobility are stifled.

Teachers enact their habitus in daily interactions with students. Even if this positioning represents more an aspirational status than an objective one, they seem persuaded to personify the dominant habitus. Nonetheless, given that they embody valuable professional, cultural, and social capital, teachers may apply it to serve as reproductive agents of the status quo or to advance an agenda of social justice, and thus subvert that status quo and function, as Stanton Salazar (1997) defines it, as protective agents.

Edgerton & Roberts (2014) verified that teachers prefer children who demonstrate highly favored attributes—such as speaking with what is deemed proper accent and vocabulary usage—over students who do not. Those so favored, the authors added, communicate with teachers frequently and they are listened to more

effectively, and as a result, they find themselves at an advantage to more readily access course curriculum. Habitus, the authors noted, affects students' "sense of [self-]agency and possibilities" (p. 195), due to the reinforcement of teacher accolades.

Embedded in such differential treatment rest adults' expectations, which may have grave consequences for children's futures. As Tenenbaum & Ruck's (2007) meta-analysis of teacher's expectations uncovered, a small but statistically significant negative correlation between low expectations for minoritized children and their low educational and occupational prospects exists, as compared with a positive correlation between high expectations and high educational and occupational opportunities for White children.

Yet this social dynamic does not go unnoticed. The study by Pringle, Lyons, & Booker (2010) of 48 African American high school students found that they perceived teachers as holding them to a lower academic standard. The following assertion by one of the female participants captures their general sentiment

> I believe [Subject teacher] hated me. He hated giving me an A but he knew that I had documented everything in his class. He told me that I had a "Ghetto Black Girl Mentality" because of the way I shook my head, moved my hands in front of the class, but he said my speech was good. (p. 36)

Likewise, the study by Grossman & Porche (2014) on minoritized students' perceived barriers to mathematics and science courses corroborated the systemic low degree of support available for their pursuing science-based careers. While the expression "off the boat" in the next citation reads problematically, still the student's remarks illustrate the problem of manifest imbalanced expectations:

> There are still a bunch of racist people out there who are stuck in the mindset that we just came off the boat, we don't know nothing . . . . I just go off on them, because I don't think anybody can say somebody can't do something else just because of their skin color. (p. 714)

Researchers have unearthed the potential of cultural capital for reversing such dynamics. Teachers occupy an exceptionally crucial place in carrying out such work. As Stanton-Salazar & Urso Spina (2003) have documented, teachers as protective role models certainly possess the agency to inculcate cultural capital amongst their students. They may teach on a daily basis, as well as perform the function of what Tramonte & Willms (2010) defined as relational cultural capital to critically engage the dominant culture.

The authors segmented cultural capital into static and relational. Static cultural capital includes upper-class activities, such as familiarity with classical music, going to museum exhibitions, or attending theatrical events. Relational cultural

capital is disseminated through parent–child day-to-day conversations regarding political, social, and cultural matters. Tramonte & Willms (2010) looked into how these two types of transmission affect students' "sense of belonging" (p. 207) and career aspirations. The results showed that relational cultural capital had the greater effect upon children's occupational ambitions.

Teachers, through the facilitation of cultural capital in schools, hold some of the answers to the dismal inequities plaguing the country's school systems. Ladson-Billings (2014), a proponent of culturally relevant pedagogy, argued that the approach's three foundational themes, "academic success, cultural competence, and sociopolitical consciousness" (p. 74), offer a potent strategy to close the academic gap for minoritized children and youth and help to reduce the cultural dissonance between a predominantly White teacher labor force and student demographics. Academic success in school implicates the convergence of four learning spheres: knowledge, skills, habits, and growing competences (Duckor & Perlstein, 2014; Ladson-Billings, 2014; Meier, 1998; Sizer, 1996; York, Gibson, & Rankin, 2015).

Ladson-Billing (2014) explains that cultural competence signifies the acknowledgment and appreciation of one's own culture and awareness and fluency in another's culture. She also states that sociopolitical consciousness means the critical stance that allows students to analyze issues from a political, racial, and social angle to understand, as Dallavis (2013) puts it, how instructional structures function for minoritized groups' academic and economic advancement.

Our qualitative study looked at the role of teachers intentionally facilitating students to generate and accumulate cultural capital. We wanted to uncover some deeper understanding of how the forces seeking to perpetuate the dominant value and belief systems could be disrupted by intentionally exposing students to static and relational cultural capital. In the following sections we first map out the study's methodology, we then discuss the results, and third, we highlight the understandings we attempted to unearth.

Methodology

We used a qualitative case study approach to understand how teachers, as protective agents, can affect the cultural capital of African American and Latinx students. This case study involved a small sample size of four adults. Smith, Flowers, and Larkin (2009) suggest that the goal of using a small sample "is to find a reasonably homogenous sample, so that, within the sample, we can examine convergence and divergence in some detail" (p. 3). The participants were selected because of their work with the African American, Latinx, and low-socioeconomic-status student populations that also attend career-focused academies. These participants also work at two different levels: two as classroom teachers, and two as midlevel district-wide leaders, in a midsized urban school district of northern California. Having these participants as data sources allowed us to capture a significant spread

of lived experiences, in terms of the number of youths at the school and classroom micro level as well as at the district-wide macro level.

Following McIntosh and Morse (2015)—who argued that semistructured interviews allow more flexibility than structured, and help more authentically capture the voices of the participants—we primarily collected data through a series of in-depth semistructured interviews in the participants' own working environments. Subjects were Amanda Garcia, a seasoned 15-year-experienced Latina teacher who has taught social studies courses in the City High's STEM academy; Morris Whiteside, a White 3-year-experienced biomedical teacher in the Hills High's STEM academy; Jordan Brown, an African American director of the Health Medical Program (HMP) at the district level, which provides summer internships in the field, in coordination with other agencies; and Lee Morales, a Latino base-learning specialist for the district, in charge of making connections with local businesses and city council members to create internship opportunities.

We conducted data reduction by compressing our codes into a limited set of convergent categories. We applied this same process in each of the interview rounds. Applying this reduction method, we worked with the next interview rounds until we identified emerging themes (Saldaña, 2015; Yin, 2013). The following section follows these themes—making familiar what is foreign, and teaching empowering language and structures of support.

Study Results

Making Familiar What Is Foreign

Breaking the defined boundaries of their neighborhoods represents a monumental challenge for low-socioeconomic-status communities. Over the years, minoritized people have been restricted to specific locations through local covenants and federal laws. For instance, in recent times, as Dickerson (2014) has shown, agencies such as the Federal Housing Administration (FHA) deemed African American borrowers to be "unstable" and non-white neighborhoods to be "dangerous," thereby stigmatizing minoritized people's neighborhoods, a fact directly linked to the decline in home values in those areas. We found in our study that this status prevents these communities' children and youths from enriching their own cultural capital. Low-socioeconomic-status neighborhoods and the schools located there find themselves virtually locked out from the larger social and cultural environments.

Field trips, in a sense, purposefully takes students out of the school building and away from their neighborhoods into spaces that may offer a different perspective on things and show other forms of living. As Lee Morales stated, "Our field trips are study trips. We're not going to go to the Exploratorium just to walk

around. We're, if we're going to go to the Exploratorium, they're going to get something out of it."

He elaborated how for students getting out of the school building meant an opportunity not only to see the physical existence of different buildings and architecture, and to engage in conversation with other, until then unknown adults on scientific theories, but to also interact with scientific tools and materials not available in classrooms. He lists the health sciences places visited, which offer pathways to STEM careers: Allied Health Career Day, Allied Health Expo at San Leandro Adult School, Health Career Day at Chabot College.

Equally important, field trips to institutions of higher education seem to trigger reactions beyond just curiosity and admiration. Amanda Garcia shared the following:

> We have students who had just yesterday got accepted to USF. That's exciting. She had to interview for that college. That was the first time we had a student apply and get in from what we've known. But only because last year we took 'em to USF and, and, one of the USF professors [who] teaches a computer programming, a coding class . . . conducted a lecture with our students and they're like, "Oh, cool, I can do this." (Amanda, interview series, 2018)

Visiting a college campus, interacting with faculty—as Amanda's students did—and later on following up—at least one of them applied to the university—mirrors the notion that building cultural capital has to do with "the capacity to reproduce itself in identical or expanded form" (González, Stoner, & Jovel, 2001, p. 156).

Morris Whiteside, after a field trip to the University of California, Davis, revealed something similar to Amanda's experience. He says that "a couple of seniors applied," but it was quite inspiring "for one student in particular, I know after the field trip, he was like, 'That's where I want to go.'" Nobody from this class had ever visited the campus prior to this excursion.

Morris also took his students to visit Joint Genome Institute, a biotech company. In an interview he said to us, "I feel like they got to see something that they wouldn't have normally seen if they weren't in the program [the STEM academy] and thought about a career that they might not have thought about."

Lee's following statement encapsulates the students' total experience: "Engaging with adults and networking opportunities has really helped a lot of these kids become more confident in their social skills." Reflecting on overcoming resistance, he added, "I mean yeah, you get a lot of the mumblers and the 'ugh,' and 'umm.' But [he exhales], three, four months in, they're chatting it up. They're asking questions. They're more engaged with a lot of different exposure to a lot of guest speakers, site tours and internships, particularly." Lee closed his assessment with this assertion: "They really blossom."

Teaching Empowering Language and Structures of Support

Closely linked to access to STEM academics, we found the opportunity to access STEM careers. Language, cultural traits, and steady support may determine this access. Certainly, educators can facilitate exposure to language linked to work-culture that youths from low-socioeconomic-status communities may have limited opportunities to experience. In one of the interviews, Lee Morales spoke about the intentional workshops teaching what he calls professional skills, from resume writing to dressing properly for work. He refers to the need to prepare future interns more carefully for interviews of potential internships, as well as workplace communication protocols. Initially, Lee acknowledges, students were "flying blind a little bit, and I was like, 'Oh my god!' Well, of course, they think they can text anybody. That's all they've been doing their whole lives. They just send random, strange texts: 'Hey, when is my interview?' You can't do that. You got to make a phone call. You've got to schedule an appointment. So, we're kind of learning as we go."

We looked specifically at the work-based patterns of spoken and written language, as well as cultural traits (the non-oral expressions such as dressing for work, working with others), as language of power. Participants referred to them as soft skills. Morris noted that skills such as group communication form an essential part of the curriculum, which seeks to equip youths with the skills to interact assuredly with the larger society. Students learn how to work with multiple types of people who reflect, he added, the social reality.

Jordan Brown explains the teaching of language of power as a situated phenomenon—that is, one chooses how to speak depending on where one may be. He also understands the crucial value of knowing how to differentiate the types of social dynamics that may dictate speech selection. He explains,

> Soft skills are definitely very important because of the fact of where we are. So, I spent a lot of time on soft skills, and how to handle different situations; it starts from the very first day when they walk into orientation, and some of my boys walk in with baseball caps on; they might not even know who I am, but immediately I'm telling them, "Take that off. You got to take that hat off when you come in here, take that hoodie off your head." Same girls walk in with hoodies on. It starts with me, when I get their e-mail addresses. And I got the cute little e-mail names, and I'm telling them, "Get rid of that email name. Or you can keep it, but you're not using it for this. Go set up another Gmail account that's got your name." (Jordan, interview series, 2018)

Lee corroborated the issue of teaching situated language, by asserting, "Some of them [students] had their 'crazygirl17 thing,' but we asked them, 'Can you change that or use your school email or something?'" While not naming his work

as forging habitus, Jordan and the other participants purposefully teach students basic dominant cultural traits. Learning the proper use of hoodies, caps, and e-mail addresses avails students of the unspoken cultural codes often out of reach in schools located in and serving low-income communities.

The following snippet of an interview one of us conducted with Lee sketches all the study participants' concerns and their dedicated efforts to teaching work cultural communication to participants as opposite to community communication.

Lee: This is another one, and they're small little things, but small things add up: when you e-mail an employer, don't be like, "Hey Mr., Do I need to be there at eight?" written in text speak. But that was on us, teachers, a little bit; we needed to inform them that you can't talk to adults the way you talk in Twitter or something.

Yvonne: Oh, okay.

Lee: Or the way you talk to your friends. I mean but that was more on us.

Yvonne: "Okay, so some examples of text speech would be?"

Lee: "U" instead of spelling out "you."

Yvonne: Oh, use the letters!

Lee: Because "b-c-u-z," stuff like that. I mean, it wasn't terrible, but it was kind of like we realized that "Oh, we should've prepped them a little bit better."

As Lee's statement "we should've prepped them" suggests, participants seemed not to have realized that students were unaware of proper social-tech protocols. Once they understood this critical issue existed, they immediately acted to educate these students on the hidden curriculum. His distinctions and conscientious dedication to conveying them to students speak to what Apple (1980) suggested about work culture as a formal and imperceptible endeavor to outsiders, one that an individual can comprehend in all its complexity only by "living within it" (p. 10).

Throughout our study, we observed participants fully focused on teaching how to write thank-you letters after an interview. They routinely checked e-mail accounts to ensure professional e-mail addresses. The intentional teaching of these cultural codes occurs within institutional structures that assist teachers' agency in a manner easily replicable and, to an extent, sustained. Participants informed us of how visits to universities, working centers, and museums start in the freshman year and build throughout the next three years of high school. This structure makes possible the sequencing of the curriculum from one year to the next, while at the same time disseminating the content, in a way that makes sense to the formal course of study (i.e., the college-going and graduation requirements) and students' interests.

Participants also listed as institutional support a counselor who keeps up, as Amanda stated, "with the student grades, and who makes sure that they know what students needed to do in order to stay in the program," plus a career and college support technician and a set of mandated workshops embedded in the school's work.

Additionally, participants explained how, besides the formal four-year structure, faculty had organized students into cohorts, and how teachers stayed with the same group of students from year to year. This practice, called looping, has existed for a long time mostly in elementary schools. Looping in high schools is relatively new. A cohort makes it possible to move the same students together from one school year to the next. It affords the time and space for them to grow deeper relationships, and therefore to forge social networks. The fact that the same teachers move with a student cohort adds an extra layer of social and structural support. Teachers develop meaningful relationships among them, and simultaneously have the chance to deepen their connection with students. They potentially work together for a continuum of four years.

Amanda explained cohorts as a strategy to know students better, in this way: "Looping and cohorting students over time is in itself an infrastructure that allows for support 'cause we know them well." She further elaborated,

> [T]here's a built-in support network, so they help each other out. They become very tightly knit as a community. Lifelong friendships. They call themselves the family, actually, a lot of the time. These kids bloom together. (Amanda, interview series, 2018)

We asked her again about the cohorts as support for students, and she responded, "Yeah, and [for] the teachers, and they bond with the teachers too, so it's really nice to watch the cohort model has a lot to be said for." These structures function throughout the entire high school experience, and manifest, in concrete terms, as Morris put it, "a culture of care." He emphasized, "Structures where we show how we care, right? And we're looking out for you, for not just one semester or a year. You know people love you and you love someone over time, right? And so, that caring happens over time."

Discussion

We have presented a case study of teachers intentionally aiding youths to become conversant with two major components of cultural capital: relational and static. Participants took on and carried out the role of protective agents. They took students to institutions of higher education, visited workplaces as potential internship opportunities, and directly taught the language of power and cultural dominant traits, thus familiarizing students with institutions and centers of knowledge. We documented here how all of this agency has the capacity to increase opportunities

in the STEM fields. Nested in complex structures of care, teachers' agency clearly appears to have contributed to opening opportunities in STEM for students.

As our findings show, teachers, as protective agents, can help disrupt systems of oppression by intentionally introducing minoritized students to otherwise foreign spaces, as well as by familiarizing them with the language of power credited, besides the work culture, by the dominant cultural ethos. Students from low-income communities, which overwhelmingly include African Americans and Latinx, are less acquainted with those institutions and that language of power than their middle-class counterparts. But they can learn both—how to relate to those centers of knowledge and employment, and how to engage the dominant upper-class habitus. Briefly stated, as our findings show, teachers hold the potential to grow both static and relational cultural capital.

Capital functions in ways similar to money, in that one may be able to start from a point and grow it from there. By purposefully exposing students to interview protocols, to cultural and linguistic code switching, or to institutions of higher learning, they may, more likely than not, become conversant in the dominant symbols controlling professional careers. Once there, these youngsters may improve their life chances. This finding resonates with what Briscoe, Arriaza, & Henze (2009) argued: once acquired, cultural capital can be transported, exchanged, and accumulated, just like money capital.

Besides teachers' agency, growing cultural capital seems directly linked to opportunity. Our study shows how taking youth away from their school buildings and out of their neighborhoods helps connect them to otherwise foreign people and places. We realized that this type of action brings to the surface unspoken codes and constructed cyphers—often called the hidden curriculum—and that with appropriate guidance, students can discern this content once they have had the opportunity to immerse themselves in it. The opportunity to gain cultural capital through these activities offer great promise, as our study has illustrated, yet this seems unavailable to most children and youths in low-income communities and in the schools serving them. Learning netiquette comes in handy here as example. This means the communally accepted method of communicating using the Internet. In our study, minoritized students became aware of what is considered an acceptable e-mail name or text speak to negotiate their involvement with potential internships. They seemed to have no idea of this prior to participating in the STEM-based work documented here. Without this opportunity, these students probably would have been left with no access to potential STEM careers.

Following Jaeger's (2011) inclusion of educational resources in cultural capital, our study added "highbrow activities" that involve visits to colleges and universities, centers of knowledge such as museums, and places of employment. Our study suggests that these activities do support cultural capital growth and may

therefore impact possible career prospects. But when they are accompanied by the intentional teaching of dominant cultural and linguistic codes, the potential benefits increase. As Tramonte & Willms (2010) have argued about static and relational cultural capital, our study suggests that one is not more important than the other, or that one can be infused in the curriculum. Our study actually suggests that for cultural capital to grow, be transported, and exchanged, static and relational cultural capital must be intentionally taught. A more adaptable type of habitus may then spring up, youth will blossom, and, as a result, they will increase their life chances.

References

Amrein-Beardsley, A. (2012). Recruiting expert teachers into high-needs schools: Leadership, money, and colleagues. *Education Policy Analysis Archives*, 20 (27). https://doi.org/10.14507/epaa.v20n27.2012

Apple, M.W. (1980). The other side of the hidden curriculum: Correspondence theories and the labor process. *Interchange on Educational Policy*, *11*(3), 5–22. https://doi.org/10.1007/BF01190034

Apple, M.W. (2004). *Ideology and curriculum*. New York: Routledge.

Archbald, D., Glutting, J., & Qian, X. (2009). Getting into honors or not: An analysis of the relative influence of grades, test scores, and race on track placement in a comprehensive high school. *American Secondary Education*, *37*(2), 65–81. Retrieved from https://www.jstor.org/stable/41406142

Best, J. R. (2010). *Human capital development in education: Challenges and policy options*. Mid-continent Research for Education and Learning (McREL).

Bourdieu, P. (1986). The forms of capital. In J.C. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York: Greenwood Press.

Bourdieu, P., & Passeron, J.C. (1990). *Reproduction in education, society and culture* (Vol. 4). Thousand Oaks, CA: Sage.

Boyd, D.J., Grossman, P.L., Lankford, H., Loeb, S., & Wyckoff, J. (2006). How changes in entry requirements alter the teacher workforce and affect student achievement. *Education Finance and Policy*, 1(2), 176–216. https://doi.org/10.1162/edfp.2006.1.2.176

Brisco, F., Arriaza, G., Henze, RC. (2009). *The power of talk. How words change our lives*. Thousand Oaks, CA: Corwin Press

Brown, R., & Campbell, D.M. (2008). Recent trends in preparing ethnic minorities for careers in mathematics and science. *Journal of Hispanic Higher Education*, 8(2), 225–241. https://doi.org/10.1177/1538192708326392

Choo, S.S. (2018). Approaching twenty-first century education from a cosmopolitan perspective. *Journal of Curriculum Studies*, *50*(2), 162–181. https://doi.org/10.1080/00220272.2017.1313316

Dallavis, C. (2013). Qualifying sociopolitical consciousness: Complicating culturally responsive pedagogy for faith-based schools. *Education and Urban Society*, *45*(2), 266–284. https://doi.org/10.1177/0013124511408597

Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. San Francisco, CA: Jossey-Bass

Darling-Hammond, L (2015). *The flat world and education: How America's commitment to equity will determine our future*. New York/London: Teachers College Press.

Delpit, L. (1988). The silenced dialogue: Power and pedagogy in educating other people's children. *Harvard Educational Review*, *58*(3), 280–299. https://doi.org/10.17763/haer.58.3.c43481778r528qw4

Dickerson, A. (2014). Sorting the neighborhood. *Texas Law Review*, *93*(1), 179–206.

Duckor, B., & Perlstein, D. (2014) Assessing habits of mind: Teaching to the test at Central Park East Secondary School. *Teachers College Record*, *116*(2), 1–33.

Dumais, S. (2005). Early childhood cultural capital, parental habitus, and teachers' perceptions. *Poetics*, *34*(2), 83–107. https://doi.org/10.1016/j.poetic.2005.09.003

Edgerton, J., & Roberts, L. (2014). Cultural capital or habitus? Bourdieu and beyond in the explanation of enduring educational inequality. *Theory and Research in Education*, 12(2), 193–220. https://doi.org/10.1177/1477878514530231

Flowers, T.A., & Flowers, L.A. (2008). Factors affecting urban African American high school students' achievement in reading. *Urban Education*, *43*(2), 154–171. https://doi.org/10.1177/0042085907312351

González, K.P., Stoner, C., & Jovel, J.E. (2003). Examining the role of social capital in access to college for Latinas: Toward a college opportunity framework. *Journal of Hispanic Higher Education*, *2*(2), 146–170. https://doi.org/10.1177/1538192702250620

Grossman, J., & Porche, M. (2014). Perceived gender and racial/ethnic barriers to STEM success. *Urban Education*, *49*(6), 698–727. https://doi.org/10.1177/0042085913481364

Jaeger, M. M. (2011). Does cultural capital really affect academic achievement? New evidence from combined sibling and panel data. *Sociology of Education*, *84*(4), 281–298. https://doi.org/10.1177/0038040711417010

Joyce, J. (2013). *Ulysses*. New York: Simon & Brown.

Kendricks, K.D., & Arment, A.R. (2011). Adopting a K-12 family model with undergraduate research to enhance STEM. *Educational Review*, *62*, 26–44.

Klopfenstein, K. (2004). The advanced placement expansion of the 1990s: How did traditionally underserved students fare? *Education Policy Analysis Archives*, *12*, no. 68. https://doi.org/10.14507/epaa.v12n68.2004

Kunter, M., & Baumert, J. (2013). The COACTIV research program on teachers' professional competence: Summary and discussion. In M. Kunter, J. Baumert, W. Blum, U. Klusmann,

S. Krauss, & M. Neubrand (Eds.), *Cognitive activation in the mathematics classroom and professional competence of teachers* (pp. 345–368). New York: Springer.

Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: A.K.A. the remix. *Harvard Educational Review*, *84*(1), 74–135. https://doi.org/10.17763/haer.84.1.p2rj131485484751

Lichten, W. (2007). Equity and excellence in the College Board Advanced Placement program. *Teachers College Record*, *6*(07).

McIntosh, M.J., & Morse, J.M. (2015). Situating and constructing diversity in semi-structured interviews. *Global Qualitative Nursing Research*, *2*. Retrieved from http:// journals. sagepub.com/doi/full/10.1177/2333393615597674

Meier D. (1998). Authenticity and Educational Change. In A. Hargreaves, A. Lieberman, M. Fullan, & D. Hopkins (Eds.), *International handbook of educational change*. Kluwer International Handbooks of Education, Vol. 5. Dordrecht: Springer.

Ndura, E., Robinson, M., & Ochs, G. (2003). Minority students in high school advanced placement courses: Opportunity and equity denied. *American Secondary Education*, *32*(1), 21–38. Retrieved from https://www.jstor.org/stable/41064502

Pringle, B.E., Lyons, J.E., & Booker, K.C. (2010). Perceptions of teacher expectations by African American high school students. *Journal of Negro Education*, *79(*1), 33–40. Retrieved from http://www.jstor.org.proxylib.csueastbay.edu/stable/25676107

Robeyns, I. (2006). Three models of education: Rights, capabilities, and human capital. *Theory and Research in Education*, *4*(1), 69–84. https://doi.org/10.1177/1477878506060683

Rosenbaum, J.E., Miller, S.R., & Krei, M.S. (1996). Gatekeeping in an era of more open gates: High school counselors' views of their influence on students' college plans. *American Journal of Education*, *104*(4), 257–279. https://doi.org/10.1086/444135

Saldaña, J. (2015). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.

Sizer, T. (1996). *Horace's hope: What works for the American high school*. Boston: Houghton Mifflin.

Smith, J.A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method, and research*. Los Angeles: Sage.

Stanton-Salazar, R.D. (1997). A social capital framework for understanding the socialization of racial minority children and youth. *Harvard Educational Review*, *67*(1) 1–41. https:// doi.org/10.17763/haer.67.1.140676g74018u73k

Stanton-Salazar, R. D., & Urso Spina, S. (2003). Informal mentors and role models in the lives of urban Mexican-origin adolescents. *Anthropology and Education Quarterly*, *34*(3), 231–254. https://doi.org/10.1525/aeq.2003.34.3.231

Tan, E. (2014). Human capital theory: A holistic criticism. *Review of Educational Research*, *84*, 411–445. https://doi.org/10.3102/0034654314532696

Tenenbaum, H., & Ruck, M. (2007). Are teachers' expectations different for racial minority than for European American students? A meta-analysis. *Journal of Educational Psychology*, *99*(2), 253–273. https://doi.org/10.1037/0022-0663.99.2.253

Tramonte, L., & Willms, J. Douglas. (2010). Cultural capital and its effects on education outcomes. *Economics of Education Review*, *29*(2), 200–213. https://doi.org/10.1016/j. econedurev.2009.06.003

Yin, R.K. (2013). *Case study research: Design and methods*. Thousand Oaks, CA: Sage.

York, T.T., Gibson, C., & Rankin, S. (2015). Defining and measuring academic success. *Practical Assessment, Research and Evaluation*, *20*(5). Retrieved from https://scholarworks. umass.edu/pare/vol20/iss1/5/

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