

CONCLUSION

Digital tools are often designed to be employed in particular ways, but the people who ultimately use them remind me that local contexts aid in interpreting their value. These interpretations do the work of embedding digital technologies into the social fabric of schools, with the result that various hardware and software are applied in ways far beyond their intended uses.

There's no clearer way to observe the power of such interpretations than through comparison. Take *Minecraft*, a video game popular with many students at the time of this study. At Heathcliff Academy, a private middle school serving mostly wealthy and White students, teachers saw *Minecraft* and other forms of kids' digital play as *essential* to learning. Faculty cited the digital know-how associated with gameplay—seeing parallels to architecture, urban planning, project management, and creativity—as valuable to education in the twenty-first century. They would even allow students to replace some class assignments with projects created in the game.

Just a forty-minute drive away, teachers at Sheldon Junior High perceived *Minecraft* and other video games as sending an entirely different signal about their students. At this school, where the student body was primarily middle-class and Asian American, the notion that *Minecraft* could be educational was a joke. Teachers variously described video games like *Minecraft* as “garbage,” subject to student abuse, or otherwise *threatening* to learning. At Sheldon, digital tools were helpful only insofar as they made it easier to accomplish “traditional” educational outcomes measured by exams.

The final school in this study took a third approach. The predominantly working-class and Latinx student body at César Chávez Middle School also played video games like *Minecraft*, but teachers there . . .

didn't really care. While they recognized that students had social lives outside of school, the faculty perceived themselves as responsible for guiding students toward working-class digital jobs. In this sense, digital play in games like *Minecraft* was *irrelevant* to school. Teachers dismissed the value of gaming in favor of teaching basic skills in coding, website-making, and word processing. Chávez faculty saw creative play in games like *Minecraft* as fun for outside of school but viewed the rote digital skills taught in class as truly educational.

These interpretative differences unearthed by school comparison reveal a major barrier to the learning agenda currently advocated by educational scholarship and contemporary education technology reform initiatives. Specifically, research on “new literacies” argues that youth and young adults, the earliest adopters of hardware like smartphones and software like social media applications, learn important skills through digital play with friends. Young people hang out, mess around, and “geek out” as they play with friends online.¹ In the process, they develop facility with online communication and collaboration, as well as the tools needed to create and share new media online. These skills, scholars argue, are valuable with respect to learning outcomes and for enhancing students' potential in our changing labor market. Why is it that faculty at a school serving wealthy and White students imagined the value of digital play in a game like *Minecraft* in the image that this scholarship describes, whereas faculty at the other two schools did not?

This question is particularly important to sociologists because it exposes a twist in our current thinking about cultural inequality in education. I write this book at an interesting point in history. Young people are more adept at using this era's technologies for production than most of their parents and teachers. Such a circumstance presents unique opportunity to ameliorate educational inequality spurred by children's unequal acquisition of valued cultural resources, like digital know-how. Scholars of educational inequality typically point to children's unequal childhoods to explain class-based differences in achievement at school.² At the time of this study, though, young people arrived at school with a similar baseline set of digital skills from play online with peers. If youth, regardless of social origin, share similar valued competencies, then underserved youth may finally make

strides in their climb up the opportunity structure in education. This is, in fact, the possibility offered to us by theories of cultural mobility: if we could only close gaps in valued cultural know-how driven by unequal childhoods, then we would see working-class children finally make strides.³

The students that I profiled in the previous chapter suggest that kids' potential as budding technologists gets bifurcated as they pass through middle school. Despite the fact that digital play with peers led to the development of digital skills with online communication, media editing and production, and even the basics of programming logic, these eighth-graders reported different conceptions of whether online play was acceptable or even welcome in schools. While students at a school for mostly White and wealthy youth came to see digital play, including social media and video games, as fun and even necessary to achievement, students at schools serving less privileged and mostly students of color were taught that play at school was either irrelevant or threatening to schooling. Schools differently disciplined digital play, and in doing so, they differently shaped how young people came to evaluate their own digital self-worth in these settings.

Sociologists have tended to ignore the processes by which digital technologies and their users are constructed.⁴ Reformers, too, paint the introduction of digital technologies in schools and among young people more generally as causal mechanisms for particular outcomes.⁵ They have not well considered how social forces at school shape the way teachers and students imagine the value of technology and what counts as its successful use. In my fieldwork, I observed how teachers differently conceived of very similar digital technologies as productive portals into young people's lives, tools for surveillance and punishment, or platforms for rote digital labor. This occurred despite school-level closures in digital access gaps.

In this book, I unpack both *how* and *why* teachers conceive of digital technologies and their students' use of them in such different ways, so that we can begin to think more critically about our methods to ensure that schools provide opportunity for upward mobility rather than create additional setbacks. Comparing educational institutions where school-level digital divides have closed helps us to uncover what blockages to student achievement might exist despite

these reform efforts. Contrasting schools serving populations that differ in class and race, key sociological predictors of student outcomes, allows us to be mindful of the interaction of student status with digital pedagogy. Permit me to begin this chapter by reviewing the story I've told about education and digital youth as evidenced by this comparative methodological approach. Then I will discuss the implications of the mechanism described in this book, namely, how race and class factor into perceptions of students' academic and creative self-worth, online and offline.

SITUATING EDUCATIONAL TECHNOLOGIES AT CHÁVEZ, SHELDON, AND HEATHCLIFF

Although I selected the schools for this study because they each had similar, high-quality technologies at their disposal, I was struck by how differently school members imagined the value of digital technologies. César Chávez Middle School (serving mostly working-class Latinx students) and Heathcliff Academy (serving mostly wealthy White students) not only had access to similar high-quality education technologies, but also shared pedagogical commitments to teaching digital skills like information searching, website creation, and programming. If a learning scientist were to survey teachers and students at both schools, they would find that school-level gaps in technology availability and digitally minded instruction were seemingly closed despite racial-ethnic and class differences in their student demographics.

Ethnographic data can do the work of documenting the day-to-day uses and interpretations of digital tools just beneath the surface of both digital access and stated pedagogical commitments. Despite the aforementioned similarities in digital access and pedagogy, Heathcliff faculty saw digital technologies as productive *portals* into young people's lives at home and among peers, encouraging students to use iPads and other tools to take photos, record video, and bring creations from their online participation to the classroom as part of a learning process. Chávez teachers instead saw digital technologies as valuable insofar as they helped to teach rote skills for technical jobs. While Heathcliff teachers used digital technologies as artifacts that blended family and peer lives with school for learning, Chávez faculty imagined digital

technologies as practice for a digitized factory shop floor. Further, the work that this basic skills discourse did was impose a top-down model of teacher-student learning; rather than seeing technologies as “portals” that treat what students do at home and with friends as having educational potential, Chávez cut those opportunities off in favor of less engaging and even paternalistic instruction.

Sheldon Junior High (serving mostly middle-class Asian American students) had different types of digital technologies than Heathcliff or Chávez, and I found out that they intentionally purchased different tools because they sought to construct a teaching environment that was armed for surveillance. Faculty and administrators used tools like Chromebooks, Wi-Fi controls, and cloud-based applications like Google Drive to monitor not just student activities but also other faculty. Teachers used these tools to police students for various types of online behavior, like texting, playing games, and watching YouTube. Interestingly, these “bad” behaviors at Sheldon were treated as educationally valuable at Heathcliff.

These findings stand in stark contrast to technologically determinist thinking, or work that argues that technologies have independent effects on their users.⁶ It’s neither the mere availability of digital technologies nor monolithic student states like “screen time” that directly lead to particular outcomes. Rather, conversations with teachers revealed a more nuanced dialectic relationship: people adopt technologies in different ways as a consequence of their social environment. In some cases, the technologies that administrators purchased differed from school to school because of these local, human factors. This way of thinking is much more in line with social theorists’ call for a relational approach to understanding technology.⁷ Further, by fleshing out how school members differently construct the value of digital technologies, we can then identify the processes that may shape day-to-day instructional practice.

DISCIPLINING PLAY

A central focus of this book was to understand what teachers did with students’ digital know-how: did they treat the digital skills these kids learned from play as a resource to help students do well in class and

get better grades? Education reforms citing the value of these digital skills would say so. Sociologists of cultural stratification in schools would say so, too. Even though students varied by race-ethnicity and class at each school, they possessed similar, valued cultural resources in the form of digital skills. According to the prevailing logic, this would circumvent inequities caused by their having arrived at school with different resources. Digital skills could be a resource that teachers activate in the classroom to help kids get ahead, a resource referred to by sociologists as cultural capital. Indeed, I find that teachers transformed kids' digital play into cultural capital.⁸ But whether teachers did this or not depended on the school.

My first task in examining how teachers treat kids' digital knowledge in school was to evaluate the extent to which students in these schools reflected national data on technology adoption among kids. Consistent with existing research, I found that the sampled youth in this study possessed a similar baseline of cultural resources in the form of digital know-how. Digital divides were, as national reports suggest, minimal when it came to access to technologies needed to play online with friends.⁹ Nearly all children regularly used smartphones, iPads, laptops, and internet-connected video game systems. Some students at César Chávez Middle School did not own as many high-quality digital technologies as students at other schools, but they all had access to a combination of the aforementioned devices such that they regularly played online with friends.¹⁰ Regardless of social origin, the youth in this study all shared similar interests in social media use, video games, online reading and writing, and image and video making. Incidentally, to pursue those interests with their friends, they had to develop facility with various digital technologies and online software. These youth did not learn this facility from their parents. In fact, students treated the notion that their parents could have helped them learn digital skills as a joke.

I use the term “discipline” to help articulate the process by which teachers transform play—the source of kids' digital skills in this study—into cultural capital for achievement.¹¹ Many of us probably think of “discipline” as corrective punishment in the classroom. The term has another meaning, one that has been used by classic social reproduction theories in education. Michel Foucault's famous (albeit

grimly articulated) explanation of “discipline” rests on a story of how power is asserted in modern society.¹² Back in the day of monarchs and lords, he argues, leaders used brute force to control people. Today we use methods that are far less gruesome and exert power in more subtle ways. We leverage the organization of institutions, like militaries, hospitals, or schools. Disciplinary practices refer to the organization of human life in various settings; “discipline” describes the effect that messages from powerful actors, like teachers, have on people who pass through these institutions, like students. The essential reason why I draw on this framework is that it can be productively used to show how teachers’ practices with digital technology can affect students regardless of their social origin. Disciplinary practices, in the form of teachers’ routine messages to students about their digital play, can uplift students (transform kids’ digital skills into cultural capital) as well as systematically hold them back (deny cultural capital).

At Heathcliff Academy, the school serving mostly wealthy and White youth, faculty invoked a view of digital technologies as productive “portals” into the lives of their students. They used iPads, interactive whiteboards, cloud-based software, and even video games to bolster students’ creative potential through online collaboration and digital production. In interviews, teachers described students’ youth cultural pursuits online as necessary to schooling. Playing online, through either online writing, video game playing, or YouTube creations, was seen as innovative and critical to classroom success. This played out during instruction, too. Teachers frequently deferred to students’ expertise with technology, encouraged them to regularly present their online interests in front of the class, and created opportunities to replace traditional assignments with kids’ new media productions. Heathcliff teachers disciplined play by transforming it into cultural capital for achievement.

At Sheldon Junior High, the school serving mostly middle-class and Asian American youth, faculty constructed digital technologies as high-stakes platforms for traditional tests, as well as tools for student surveillance and punishment. Administrators opted not to purchase interactive whiteboards because they wanted faculty to constantly roam around the classroom and monitor student behavior. On top

of that, teachers and administrators actively lurked on students' accounts to police many of the same playful activities that were validated at Heathcliff. Students were reprimanded for playing online, like perusing YouTube videos, playing video games, or even communicating with their peers using text-messaging software. Online play was seen as deleterious to classroom achievement. Instead, teachers used cloud-based technology to create online quizzes or other activities that pitted students against one another. Sheldon teachers disciplined play by rendering it threatening to learning, and therefore cut off opportunities to transform students' digital skills into cultural capital for achievement.

At César Chávez Middle School, the institution serving mostly working-class and Latinx youth, teachers saw digital technologies as key tools that students would use in what they imaged to be a twenty-first-century factory. They emphasized students' need to develop "basic skills" with these technologies, skills that included many of the celebrated literacies at Heathcliff, like programming basics, use of presentation software, and new media production. But a critical difference is that Chávez faculty saw students' digital play as irrelevant to learning. This meant that teachers communicated to students that their creative expressions online, including social media use, video games, and peer communications, would not help them do well in school or in a future job. By disciplining play in this way, teachers prevented it from becoming cultural capital for achievement. Instead, what counted was students' proficiency in skills needed for rote digital labor.

Disciplining play is how schools reproduce inequality in the twenty-first century. Children come to school with a similar set of baseline digital skills they have developed from play with peers, such as knowing how to communicate online, as well as how to create and share digital media. This presents an opportunity for cultural mobility, one that may potentially circumvent our existing theories that suggest that children's unequal childhoods lead to later stratification in achievement. I found that teachers invoked an orientation to digital technology and students' online play and enacted this perspective with students during instruction. Kids' digital know-how was shut down at schools serving working-class youth and students of color,

whereas it was transformed into cultural capital for achievement at a school serving more privileged White youth. These divergent pedagogical approaches to play determined whether kids' digital play was activated into cultural capital or not. But *why* did teachers do this?

WHERE DISCIPLINARY ORIENTATIONS COME FROM

Social reproduction theory points to teachers' perceptions as a key driver of social stratification in education.¹³ As the story goes, teachers assume wealthy children are destined for leadership jobs, while relegating working-class kids to the factory floor. As a result of these perceptions, teachers subconsciously guide their students toward these paths during day-to-day classroom life. The end result is that students develop class-differentiated self-concepts, career aspirations, and educational habits that turn wealthy students into upwardly mobile leaders and push working-class students toward working-class jobs. But as I interviewed teachers for this study, I felt as though this argument wasn't fully lining up. The first sign of this was when I asked teachers to describe their student body: faculty would share multiple, conflicting stereotypes about the abilities and potential of their students of color in interviews but acted upon only a single stereotype in the classroom and elsewhere at school.

What I documented from interviewing the predominately White faculty at each school was that nearly all shared two competing views of their students of color—two ways of perceiving working-class Latinx students, and two constructions of middle-class Asian American students. Faculty at Chávez described their students as “benevolent immigrants,” but when describing working-class Latinx students elsewhere, they referred to them as “future gang members.” Teachers at Sheldon portrayed their Asian students as “cutthroat hackers” but reflected that Asian students they had taught elsewhere were “model minorities.” Not only did social reproduction theory not consider how imagery associated with student race-ethnicity would play into teacher perceptions, but it also failed to predict that teachers could exhibit multiple, contradictory perceptions of similar student demographics. This would seem to throw a wrench into theory replicability.

If education scholars had paid more attention to the sociological literature on race and ethnicity, we would have known that teachers exhibit a range of stereotypes of students of color. For example, some studies find that some teachers construct working-class Latinx students as hardworking immigrants, while others view students who are Latinx as having criminal intents. Other studies show teachers constructing upwardly mobile Asian-American students as model minorities, or bound for success as a consequence of racial affiliation, whereas some work portrays such youth as cutthroat competitors.¹⁴ I, too, observed diversity in the types of cultural imagery teachers drew upon to construct their students of color.

What also makes race a particularly important aspect here is that despite exhibiting multiple sets of stereotypes about students of color, teachers at each school did not have any comparable racialized imagery to describe their White students. Teachers would not describe their students as “White students” but rather referred to White students only by their individual names. When asked about White students, teachers’ take was that they were unique and could not be generalized about, despite having just generalized about their Asian and Latinx students earlier in the interview.

Fortunately, theories of colorblind racism fill in the gaps left by class-focused editions of social reproduction theory. Theories of colorblind racism argue that contemporary racial ideology arms Whites with tools to “not see color” while simultaneously asserting very problematic racist perceptions and practices that benefit Whites at the expense of people of color.¹⁵ One way that colorblind racism does this is through Whites’ racial stereotyping.¹⁶ Racial stereotypes allow teachers to attribute particular assumptions (like academic performance) about their students to inferences about the collective experience of that student’s entire racial-ethnic group. These stereotypes then provide a lens for interpreting pedagogical needs in the classroom, encouraging teachers to instruct students not as individuals but rather as unfair and inaccurate representations of academic worth based on their racial-ethnic group.

Although some of the racial stereotypes of students in this study at first seem more “positive” than others, even these positive stereotypes reproduce Whites’ colorblind ideology. Portraying Asian students as

“model minorities,” for example, simplifies the lived experience of an entire racial-ethnic population and fails to treat the student as an individual person. Such practice also puts incredible pressure on students to uphold these stereotypes, rendering academically struggling Asian students invisible.¹⁷ It also drives tension between student racial-ethnic groups, pitting the “model” group against others, when in fact the source of such tension is Whites’ broader racist ideology.¹⁸ White students, however, were treated as individuals—to make generalizations about them evoked confusion and even anger from White faculty, who felt such generalizations were unfair and problematic. Ultimately this creates an asymmetry in teacher’s perceptions of why good or bad things happen to students: “model minorities” are intelligent because of their racial-ethnic makeup, whereas the intelligence of Whites is based on their own capability and individual effort. Further, if teachers socialize this perspective in the classroom, we can imagine it differently affecting students’ sense of academic self-worth along racial-ethnic lines.

Although theories of race and colorblind ideology clarify the form and history of teachers’ racial stereotypes for students of color, as well as the differential treatment benefiting White students, they did not help me to make sense of the contradictory stereotypes that teachers possessed about the same racial-ethnic student populations. How could it be that the same teachers could describe their current Latinx students as “benevolent immigrants” and yet describe Latinx students they had taught elsewhere as “criminals”? Both stereotypes exist in our society, but theories of race and racism do not explain how dichotomous stereotypes can coexist and still produce unequal educational outcomes.

I ultimately argue that to understand the sources of teachers’ perceptions, we need to look closely not only at teachers’ relationships with their students, but also at teachers’ relationships with other teachers. Although some notable work documents the impact of trust among faculty on student achievement, scant research exploits how faculty workplaces may shape their perceptions of students of different races and classes.¹⁹ Much of education literature initially gave me a kind of tunnel vision as I studied these schools: all my questioning and observations were focused on students and teachers’ interactions

with students. But the true beauty of ethnographic work is that I could not ignore the terrific gossip, stories of camaraderie, and tales of workplaces past shared by teachers in the faculty lunchroom and elsewhere at school. The faculty in this study inadvertently guided me toward research on organizational culture.

School-focused work in the literature on organizational culture argues that faculty workplaces host norms shared by teachers. These norms are not necessarily brought by teachers to the school, but rather emerge from the history of the school and are situated in a particular setting. Existing work on this topic examines whether schools differ in whether teachers are collaborative with one another or instead more hostile. Differences along these dimensions indeed exist by school and predict student achievement. At workplaces where faculty collaborate, student race and class gaps in achievement are lessened; at schools where faculty are less collaborative and more hostile to one another, student race and class gaps in achievement are aggravated.²⁰

With the data from this study, I can't pinpoint where teachers obtained racialized and classed stereotypes of their students, but I *can* show whether teachers possessed those stereotypes and how they deployed them at school. In this study, I find that in the context of an interview, teachers displayed awareness of multiple constructions of Asian American youth as either model minorities or Tiger Mom-raised, cutthroat hackers. But I find that only teachers at Heathcliff saw their Asian American students as the former and only teachers at Sheldon saw them as the latter. Teachers at Heathcliff shared an orientation of serving elites (their students) as a consequence of parental pressures. This workplace dynamic aligned with the model minority imagery they described during interviews. At Sheldon, however, teachers shared a threat orientation to their students as a consequence of how faculty interpreted neighborhood demographic shifts as a violation of their racial and social boundaries. This view of students as threats aligned with the cutthroat hacker imagery they described during interviews.

Faculty also reported a similar set of beliefs about Latinx students as either benevolent immigrants or future gang members, but only teachers at Chávez saw their Latinx students as the former and only teachers at Sheldon saw them as the latter. Teachers at Chávez shared

a caretaker orientation to their students as an extension of the family-like, “in it together” mentality that carried over from their transition from an elementary school to a middle school. This caretaker orientation aligned with the benevolent immigrant imagery teachers described during interviews. At Sheldon, however, the aforementioned threat orientation also applied to their Latinx students, and faculty at that school thus drew upon future gang member stereotypes.

Faculty workplace norms and teachers’ perceptions of students of color are directly related and drive their disciplinary approach to kids’ digital play. Sheldon faculty reported their workplace as “every man for himself”: rife with hostility, teacher-to-teacher surveillance, and competition. The fractious dynamic among Sheldon faculty drove perceptions of middle-class Asian American youth as “cutthroat hackers” and their smaller population of Latinx students as “future gang members.” Teachers at Sheldon therefore saw kids’ digital play as inherently threatening to schooling, and they disciplined play for the youth of color by denying its potential as cultural capital for achievement. Chávez faculty reported their workplace as “in it together,” a family-like dynamic of support and collaboration. The “in it together” dynamic among Chávez faculty drove perceptions of working-class Latinx youth as “hardworking immigrants”; teachers thus saw kids’ digital play as nonthreatening but irrelevant. Teachers instead confined school-sanctioned activities to rote digital labor they believed would help their students get jobs someday as contemporary worker bees.²¹

An interesting consequence of colorblind racism is that the invisibility of Whiteness privileged White students, no matter the school context. Literature in this space argues that Whiteness is not typically seen day-to-day as a racial identity or categorization, but is rather collectively seen as “normal” and muted, whereas other minoritized groups are systematically marked. As a consequence, the actions of Whites are seen as individual whereas those of people of color are interpreted as a representation of their racial-ethnic group. This played out exactly in Sheldon and Heathcliff, the two schools with White students, but in a paradoxical way. White students’ successes at Heathcliff were seen as a result of their individual achievement, whereas Asian students’ successes were seen as a result of being Asian (“model

minority”). Asian and Latinx students’ bad behavior at Sheldon was seen as a result of being Asian (Tiger Mom-raised hacker) or Latinx (“future gang member”), whereas White students were predominately ignored or punished less severely. The invisibility of Whiteness both elevated White students and shielded them from potential sanctions that students of color experienced.

Education research on teachers’ beliefs has largely been conducted in a separate domain from that on school workplace culture. I address the puzzle of where teachers’ disciplinary orientations to children’s play come from by showing how teachers’ beliefs and faculty workplace dynamics interact with one another. Let’s talk next about the ways in which these perceptions, and resultant disciplinary approaches to digital play, differently socialized children as digital actors in and outside of school.

SCHOOLS AS SOCIALIZING AGENTS FOR DIGITAL PARTICIPATION

I had always planned for a chapter exclusively using interviews with students to understand how they experience the school structures I document in the rest of the book. Initially, I pursued a thread, guided by sociologists of education and internet researchers, to understand what shapes whether students take advantage of resources available online. Online resources, which could be anything from online news, politics, government resources, or art, have been described by some researchers as “capital-enhancing” activities that could help drive educational outcomes, much like their offline counterparts. Certainly, understanding whether students are differently coached into taking advantage of such resources would reveal a digital inequity worth addressing.

One of the most longstanding lessons I have learned from interviews with kids is that they will straight up tell you when you are missing the real story. They taught me that it isn’t a simple matter of being coached to seek out the “right” content or activities online. It’s also about the powerful role schools’ disciplinary orientations play in shaping not just whether but also *how* students participate online

in ways that may lead to unequal gains. I found that students from Heathcliff curated a professional identity online aimed at conveying readiness for elite colleges and universities, whereas students from Chávez created and shared primarily for friends and exhibited little institutionally minded savvy in how they presented themselves online. Sheldon students, however, hid their identities online for fear of teacher reprimand, leaving few digital traces for future colleges or employers aside from their school records.

These reactions matter because they unpack a critical aspect of what scholars term an online “participation gap” by making a sociological connection to school socialization. Media scholars argue that people arrive at information-rich online environments with an unequal distribution of resources, or the know-how to effectively find and take advantage of important online information or online learning experiences. Quantitative work is even starting to see demographic differences in online participation: wealthier people seem more likely than those less well-off to use the internet to learn stock prices, check economic and political news, use email, use search engines, and access health information. Socioeconomic status and gender are associated with different likelihoods of creating and sharing media or information online, rather than simply consuming it. These worrying differences in participation along lines of socioeconomic status, gender, and education are seen by internet scholars as a signal of potential inequities. A contribution of this chapter is to understand not only how schools affect whether students access these online resources but also how students differently learn how to curate online presences that might lead to unequal outcomes.

Fully understanding kids’ digital practices requires understanding the contemporary playing field for online participation. Fortunately, internet scholars have also done some of this theoretical work for us by fleshing out a concept called *networked publics*, or the many stages for interaction online that connect people locally and globally.²² Drawing on Erving Goffman, they argue that people navigate networked publics strategically, because shared media or interactions online bleed into other contexts, including not only other websites, social media networks, and online communities, but offline contexts as

well. Think of someone texting an embarrassing photo of you to a group of friends—someone could save that photo, upload it to a social media network, and who knows who could see it after that point? As explained in chapter 4, “networked publics” refers to the many, many online contexts that exist and may at any point connect digital traces to other audiences. What’s fascinating is that I find school-level differences in how teachers socialize students into particular strategies for navigating networked publics.

Teachers’ disciplinary approach to their students’ digital play is a mechanism that drives school-level differences in how these kids learn to participate online. Recall that at César Chávez (predominately working-class Latinx youth) teachers disciplined students’ digital play by communicating that it was *irrelevant* to school. In turn, students came to think of play as distinctly separate from, and irrelevant to, school. Youth then pursued fun-filled activities online, like gaming, media making, and music creation, with their friends as the primary audience. Faculty at Heathcliff Academy (predominately wealthy and White youth) instead disciplined digital play by communicating to their students that digital play was *essential* to school. As a result, digital play became inseparable from school, and these youth curated their online identities, including interests in activities like gaming, as well as cosmopolitan affinities like gymnastics, debate, and Krav Maga. They did so while heeding the possibility that teachers and future college admissions officers might see their activities. Teachers at Sheldon (predominately middle-class Asian youth) disciplined digital play by communicating to students that their play was *threatening* to school. Like Chávez youth, Sheldon students also came to think of play as distinctly separate from school, but went to considerable lengths to hide their digital traces online: locking their social media accounts from the public or using apps that allowed them to ghost, or participate online, in ways that left little evidence that they were there. They did so to avoid discovery by their teachers, who would punish them for “messing around,” as they regularly observed happened to other students. These students said that their hope was that future colleges would reflect only on their school records, given their tightly regulated approach online.

This suggests that disciplining play is a teacher-driven form of socialization, and the work that this socialization does is to create a symbolic boundary between “school” and “play” that affects how students see the relationship between their own creative work and educational institutions. A by-product of such a relationship is that students develop normative interpretations as to whether digital play is *appropriate* online and, if so, whether the intended audience should include education officials like teachers, college admissions officers, and future employers. Further, these differences occurred along lines of student race-ethnicity and social class, with only Heathcliff’s wealthy and White children curating a digital identity not unlike a resume for future colleges.

The students in this study help us to unpack internet scholars’ quantitatively observed digital participation gaps by revealing the role that schools serve in shaping whether young people participate online, with variance along lines of student race-ethnicity and social class. But these youth also injected a sociological perspective into this work—namely, *how* they participate is just as critical as whether they go online at all. Specifically, the students in this study variably participated online depending on the audience. Online environments are not simply places where students can obtain information, access government resources, or see art, as the literature on online “capital-enhancing” activities suggests. They are stages where kids’ interactions endure online, potentially forever—and the students in this study showed signs of being differently coached for whether they should be participating online in ways that look good for educational institutions or not.

In what follows, I discuss the theoretical and practical consequences of this and findings from the other chapters in this book, working backward from students’ online play, to teacher workplace cultures, to the cultural ramifications of disciplining play in education. Although this book is not meant to be a handbook of applied solutions to the discussed issues, I conclude this chapter by attempting to translate, in plain terms, how the themes of this book apply to key stakeholders: teachers, including curriculum designers, teacher professional development administrators, parents and caregivers, and education technologists.

STUDENT CREATIVITY AND ALIENATION

A careful reader will notice that many of the phenomena described in this book could occur without digital technology present, as well. The mechanisms I document—teachers’ messages to students about the value of their play, teacher workplaces, and organizational culture—likely occur even when digital technologies are absent. The focus on social dynamics that inform whether student play is activated or not as cultural capital for success is what makes this project sociological. This “digital era” simply provided an important setup to test theories of unequal childhoods and cultural inequality in education. It allowed me to show processes of alienation that affect young people at school that cannot entirely be attributed to inequities in child-rearing practices.

Social reproduction theorists in education rely heavily on Marx’s theory of class domination to explicate processes of alienation through schooling. A central component of his theory is that institutions dominate human beings by regulating workers’ creativity. Marx argues that workers’ true creative selves are warped and suppressed such that waking hours are devoted to rote factory labor in the interest of subpar reward. The bourgeois who ran these factories created the conditions in which the working class systemically experienced a loss of self on the shop-room floor. Bowles and Gintis famously ran with this idea when articulating social reproduction theory in education. As the argument goes, schools serving different student class populations socialize children into different habits, skills, and notions of self-worth. Wealthy children are taught to be determined CEOs who see opportunities, take creative risks, and cash in; middle-class children are taught to be managers who keep the ship running; and working-class children are taught to be factory laborers. School socialization works by depositing in children durable sets of habits and dispositions, such as aspirations, academic self-confidence, and approaches to schoolwork that guide them to different academic trajectories and class-distinct outcomes in the labor market.

Sociologists often treat digital technologies today as quite different from the factory technologies studied by academics past. In my mind, they’re essentially the same in that they are artifacts that can be adopted as part of capitalist processes. A central goal of this study was to tease out whether and how digital technologies were variably

taken up by schoolteachers and invoked in ways that lead to social reproduction. Sadly, despite teachers' best intentions, I find that they were. As I tried to understand how digital technologies were used in these schools, I learned something about social reproduction that Bowles and Gintis missed but that Marx knew all along: an essential component of school socialization is that the "inner supervisor" implanted by teachers in students' consciousness is a particular configuration of "work" and "play" in institutionally sanctioned contexts. This internalized boundary between work and play is how culture drives action, not only inside schools but outside school and even online, in ways that appear to differ by students' race-ethnicity and class.

The best parallel to these findings is in work by Paul Willis.²³ He found that teachers treated working-class and middle-class high school students differently, and in ways that led the former to differentiate themselves from school culture and the latter instead to integrate with it. This varied differentiation and integration was what caused students to develop different tastes in postgraduate working environments: working-class students favored the factory room shop floor, as it felt familiar and validating of the culture in which they had participated as a result of teachers' class-based marginalization. I see the present study as adding to this work in several ways. First, by conducting a comparative study of three schools, I showed how the story is not just one of within-school stratification. It occurs *between* schools as well: teachers do not need to segregate within their own school to contribute to system-level social stratification. Second, I show that social class is just one aspect of a broader system of statuses, including race-ethnicity, on which teachers draw to regulate children. Third, by studying middle schools, rather than high schools, I can focus on kids' play at a time when it is highly formative in their development. Watching teachers discipline kids' play starting at ten years old and then comparing how ten-year-olds and fourteen-year-olds talk about their creative self-worth to teachers is compelling. It tells me that integration and differentiation is in many ways grounded in how children differently learn to see play (their creative selfhood) as important to schooling.

Further, when thinking about the different configurations of work and play that students at each school in this study developed, I am

unconvinced that any student—wealthy or working-class, White, Asian, or Latinx—truly “wins.” Certainly the predominately wealthy and White students at Heathcliff were being cultivated for continued upward mobility. But again, I think that Marx was right in that the institutional processes of domination warp anyone touched by the system.²⁴ Remember that Marx’s theory of alienation refers to the estrangement humans experience in a stratified society. Factory workers, like the working-class Latinx students in this study, are forced to see their creative self-worth as unwelcome on the job. This is an example of what Marx would describe as alienation, or an unnatural regulation of creativity that renders factory workers hollow shells who slave for hours to build products with which they have no meaningful connection. As I interviewed students at Heathcliff Academy, I noticed that they had developed an eerie sensibility, one that suggested their creative selfhood mattered only insofar as it conveyed moral worth to powerful officials like those in educational institutions.²⁵ This was dramatically different from how students at César Chávez Middle School described their play outside of school, like making online music with cousins or creating worlds within *Minecraft* with friends. There was a huge and critically important power differential in that Heathcliff students were more or less being guided toward continued economic security, while Chávez students were guided toward working-class jobs. Still, I would argue that even Heathcliff students experienced some alienation in that their creative selfhood had been merged with the educational institution: they were only as worthwhile as they were in the eyes of the system.

What I hope to convey here is that disciplining play creates incredibly high stakes for children in that it shapes whether they will view their own creative selves as important or not. In other words, disciplining play is a method of alienation that serves as a mechanism for social reproduction in education.

THEORIES OF CULTURAL RESOURCES AND DIGITAL DISTINCTIONS

Another goal of this book was to unpack some of our thinking as sociologists of education studying cultural resources. So much of education

research on culture rests on notions of unequal childhoods, or the idea that children arrive at school with class-based differences in habits and skills that result in unequal gains. One problem with this approach is that many misinterpret it to mean that parents need to raise their children differently, that poor families need to learn how to teach their kids the things that wealthy families do.²⁶ This mistakenly places the burden on families. Poor parents are thought to need to “do better” in giving their kids the resources they need to succeed. In fact, Bourdieu really meant that the problem is the educational institution. Teachers grade children based on standards of achievement shared by wealthier people (not simply how they do on a test, but when and how they ask for help, the types of interests they exhibit, etc.).

The other problem is that we as Bourdieuians have done a terrible job exploring the relationship between race and class, or intersections of other statuses more generally.²⁷ With few exceptions, the argument we’re left with from work on cultural capital in education is that if both a working-class Latinx child and a working-class White child learned the same valued cultural resources, they would both achieve. This is, at its core, the theory of cultural mobility. In this book, I use the case of digital skills to flatly show that this theory of cultural mobility is false. I believe that the original thinking here suffers from a misinterpretation of Bourdieu. The “rules of the game,” so to speak, enforced by educational institutions (Bourdieu refers to this as a social field)²⁸ don’t have to be based just on social class. They could be any set of habits, skills, or statuses as long as they are part of institutional authorities’ shared expectations. The history of the US educational system is so deeply intertwined with histories around race and ethnicity that not to acknowledge race in cultural theories of schooling is a disservice to research on educational equity—and, quite frankly, it reeks of institutional racism within our own sociological halls.²⁹ It results in theories of equity that make false promises of cultural mobility to students of color and their families.

I do not say all of this to discount decades of work on cultural capital and class-based stratification in schools. The sheer volume and replicability of such work clearly show that teachers variably treat class-based differences in kids’ skills as valuable to school or not, and