Chapter 1. The Work Ethic of Black Women Coders

> In other words, knowing a woman in STEM can have substantial impact on young girls' sense of ability and opportunity regarding a field like computer science. It's called the "snowball effect." The more women working in STEM, the more likely girls can see them as role models who can aspire to emulate.
>
> – Watkins, 2019, p. 133

> For Black women to feel like they belong in computing, they need to acknowledge their whole self, realizing there is no hierarchical structure for oppression.
>
> – Solomon et al., 2018a

To be in Clearwater Academy, you must prove you are poor. Work history, and other kinds of documentation, like tax returns showing income, proved to Clearwater Academy that the right people were getting the resources meant for them. Applicants show on their résumé that the best job opportunities prior to attending Clearwater Academy had been low-waged work. Low-waged work signals a lot of things to Clearwater Academy. Low-waged work often means "low-skilled work" (more on critiques of this term later). Based on a sample of participants' résumés, Black adult learners in this study worked as restaurant servers, daycare providers, club bouncers, sales associates, and cashiers. Other kinds of labor included activities that are better off the books, such as selling drugs. Illegal activities may become the only source of income when employment options dry up in their area. Richard recalled an automotive assembly plant shutting down in a town south of Sakowin. Many laid off workers didn't have the experience to work for the local school district, the second largest employer in the county, so some of them turned to illegal activities to access social mobility.

Low-skilled work also meant applicants never had the chance to study computer programming, because they didn't have the funds to pay for that kind of education or didn't know where to find those resources if they even existed in their schools or communities. Clearwater Academy would fill those gaps: provide resources for free so applicants could get legal access to social mobility. Clearwater Academy also attracted applicants from another sort of

working people: the degree-holding well-off type. Some of these applicants came from neighboring states. Why? "A lot of that is we're the only free opportunity [in the region]," Richard explained to me in July 2017. My interview with him and Jessica came on the heels of my first round of participant observation and interviews with the spring semester class. "We're the only opportunity that moves this fast, too. Most of these kinds of bootcamps are six, nine months. This is fourteen weeks." Richard and Jessica routinely rejected these out-of-state applications because they came from privilege, and they would most likely take their talent back to their home state. Clearwater Academy wanted low-income talent that would stay in Sakowin.

Yet Black adult learners' work history also suggested they didn't have the potential to meet the standards of the tech industry, or it would be a heavy lift to bring them up to those standards. After he joined Clearwater Academy as the new technical skills instructor in 2016, Richard had frank conversations with sponsors about how the program could improve. They told him, "There's no way these people get into these positions … after having gas station and retail being the best opportunity they ever had. They had bad habits. Social skills." Instructors before Richard had not prepared their adult learners for tech's workplace cultures, so they failed miserably on the job. The work ethic they knew (or didn't know) from prior work experiences wasn't going to cut it for these tech industry partners. Clearwater Academy graduates didn't just need to know something about computer programming; they needed to have been *transformed*. (Chapter 3 discusses in-depth the racial implications for transforming Black adult learners into valuable coders.) Low-waged work may be written-off, discounted, treated as unsophisticated and against a tech sponsor's interests. At the request of some tech sponsors, Clearwater Academy trained adults in employability skills and computer programming as a project that separates histories of low-waged work from their adult learners' next career. Only what's learned in those three and a half months should transfer to the next job, not the bad habit to go on smoke breaks every hour. Adult learners enter Clearwater Academy with little cultural and technological know-how for the tech industry. But by the time they leave, graduates' value as workers should have increased because "literacies produce value" (Watkins, 2015, p. 122).

In this chapter, I analyze six Black women adult learners' literacy work histories that tell a different perspective on low-waged work. These women spent their lives developing and using literacy for low-waged work in ways that was more meaningful than typically thought. Specifically, expect to read about how different jobs had underused their literacies and disrespected their lives as Black mothers. Their work was also often precarious: short-term positions or jobs with companies that were later bought out, merged, and downsized.

So these women moved from job to job less for social mobility and more so they could find an answer to a question: How do I take care of my family now? Yet in the background, and at times explicitly described, these Black women adult learners identified glimpses of empowerment through digital literacy. In some cases, training in computers recalled their curiosities and interests in digital technology from childhood; in others, they found their philosophy for education and their lived experiences as Black women affirmed. In short, they encountered different conditions and digital literacies in the labor market throughout their history. From their experiences, these Black women learn the kind of work ethic they expected and needed to leverage coding literacy into better life opportunities. Their literacy work histories tell a complicated relationship among race, gender, labor, and literacy that ultimately inform their decision to include Clearwater Academy in their literacy histories. While Black women navigating a racist and sexist labor market isn't new, what is new are the work ethics they draw from their history as they turn to Clearwater Academy for computer programming. In this chapter, past experiences with digital literacies across home, school, and, especially, work—even though these Black women adult learners did not engage with coding literacy—coalesce into new ways of describing what technology can be in their present and future. This Black coding discourse would, they hope, later lead to a Black tech ecosystem in which knowledge work's flexibility would reward them meaningful contributions to technology design and, ultimately, access to family and community.

A nation-wide cultural bias in the United States toward low-waged work hides these dynamics. "Low-skilled work" suggests personal failure of the worker: that they were too lazy to do better, compared to the often more valued high-waged, often college educated so-called "knowledge work." The reality, however, suggests that "American labor standards, racism and sexism, and social and educational infrastructure" drives millions of Americans into this work (Lowrey, 2021). Low-wage work feels and looks easy and is disposable or replaceable with automated technology. The COVID-19 pandemic, for example, revealed the federal government's mixed messages about the value of low-waged workers. The Cybersecurity and Infrastructure Security Agency's (CISA) Essential Critical Infrastructure Workers "identifies workers who conduct a range of operations and services that are essential to continued critical infrastructure viability, including staffing operations centers, maintaining and repairing critical infrastructure, operating call centers, working construction, and performing management functions, among others" (Krebs, 2020, p. 1). People who could work from home during lockdown, or who simply lived at home because they had lost their job to the pandemic, relied on these low-waged workers to keep their lives going as normal as possible.

Despite their value to the economy, low-waged workers were not given necessary protections against COVID-19 to ensure they could even support critical infrastructure (Wolfe et al., 2021).

As some version of normal life emerged in 2021, office workers debated with employers about returning to their desks and other workspaces in-person. Many had gotten used to remote work and saw little reason to start commuting again. After signing an executive order to end fines imposed on small businesses in New York City in January 2022, Mayor Eric Adams added his two cents on the debate to journalists: "Many employees are saying, 'We don't want to come back into the office …' Now, that's fine, if we weren't connected. My low skill workers—my cooks, my dishwashers, my messengers, my shoeshine people, those who work in Dunkin Donuts—*they don't have the academic skills to sit in a corner office*. They need this. We are in this together" (Hess, 2022, emphasis mine). Those same cooks and dishwashers criticized Mayor Adams for associating intelligence and education with office work and for suggesting so-called uneducated people could only get blue collar work. The incident with Mayor Adams reflects competing perspectives of low-waged work: it has immense value but doesn't; they are an example of taking off the comforts of home for economic productivity that office workers should follow, yet their education limits them from reaching the full potential that knowledge workers have.

Controlling images of Black women's social position in the United States create intersectional oppressions that exacerbate cultural biases against low-waged work. Controlling images are false archetypes of Black women, or a set of social expectations and standards held by both Black men and white people. The mammy, the matriarch, and the welfare mother, for example, suggest Black women must be either all-powerful, all-desperate, or all helpless; Black women, as Patricia Hill Collins (2009) writes, are often socially constructed as serving the engines of the patriarchy and white supremacy, not for themselves, for their families, or for each other. In West Africa, women tied work and family together as equal sources of nourishment. However, slavery forced Black mothers to labor for white families instead of their own and stripped Black women's control over their work conditions and reproductive rights. Their children became property by proxy and helped increase plantations' enslaved labor. After the Emancipation Proclamation, Black families could not live off the wages of Black fathers alone, necessitating that Black mothers work in either one of two locations that paid low wages: the fields of white families or the homes of white families. Even so, single, divorced, or widowed Black women participated in the labor market more than married Black women, and especially, white married women, in the 1870s and 1880s (Goldin, 1977). By law, single Black women could not rent land in the late 19th

century, so many of these single women migrated to urban cities. In the North and Midwest Black women found day work, yet awful relationships between Black women and their employers persisted. White men sexually harassed Black women one second and then turned around in another second to use them as submissive confidants that would listen to their displeasures about their wives, children, and other family members.

In the 21st century, single Black women continue these legacies of race, gender, and class oppression: most Black women in the United States work low-wage service jobs, and although most Black women are the sole breadwinners in their household, they make significantly less money than white women (Frye, 2023). These logics of American Black women labor operate on a global scale in infrastructures for digital communication. Safiya Noble notes that Silicon Valley's success relies on the low-wage work of the Black diaspora. These companies outsource mining cobalt, the essential mineral for computer hardware, to Congo, where wars over the valuable materials for profit persist. Neither Silicon Valley nor its loyal customers give much attention to the fact that their technologies are built with the blood of "artisanal miners" (Kara, 2023), a clean name that tries to make invisible Black people's strenuous and dangerous work (Noble, 2016). Living in intense poverty and under patriarchy, women (and even children) often work in the cobalt mines to support their families, earning one to three dollars per day (Sovacool, 2021). According to one estimate, twenty percent, or 400,000 workers, are women. And their status as women forces them to take low-waged work, from collecting the materials to, more often, cleaning and sorting the minerals. Working in these unregulated mines, attract systems of sexual exploitation and abuse (Sovacool, 2021).

However, Black women have an ongoing legacy of turning knowledge of and experience with oppression into action, carework, and survival, which they express through multiple literacies, from literature (Fisher, 2007) and hip hop (Craig & Kynard, 2017; Richardson, 2021) to theatre (Winn, 2011). Despite Black code laws that restricted enslaved Black people from learning reading and writing, Black women developed their own version of rhetorical education and rhetorical activism throughout the 19th century (Royster, 2000). In our digitally networked world, fighting for liberation in digital spaces is a type of labor itself (Jones, 2019; Russell, 2020). In the early 2000s Black women used social media platforms such as blogs, Black Planet, and X (formerly called Twitter) for liberating discourses. However, in the late 2000s and onward, mainstream media's attention turned Digital Black Feminism into a commodity, a product, a profitable spectacle, especially for social media platform's ad revenue. Black women have found ways to turn both their individual cultural brand and Black feminist thought into profit. Despite that success, they must be considerate

of how corporations still siphon money off digital Black feminists' labor and how users can fail to interrogate and use Black feminist thought for deeper critical analysis. As Catherine Knight Steele (2021) writes, "Selling Black feminism raises concerns about whether Black feminists can sustain their relationship with capitalism and profitability online while pushing for systemic change. However, it also reminds us that Black feminists are already managing to do so" (p. 139). Black women entering STEM, and computer science more specifically, must wrestle with how systems of oppression call them into being exploited further and into being unwitting participants in designing or supporting digital technologies that exploit their own people.

My argument in this chapter joins other scholars in literacy studies that correct dehumanizing views and practices of low-waged work literacies. Among others (Hull, 1999; Marotta, 2019), educator Mike Rose's work helps me identify the empowering meanings Black women in this study attach to labor throughout their literacy work histories. Rose (2004) observes that we often think blue collar jobs require physical work alone—the body and the hand get things done. The testimonies he collects from his mother and other people working across different occupations—from restaurant server to electrician to welder—show how these jobs involve complex cognitive work. Rose goes a step further by describing a surgeon's manual labor on an operating table. Rose breaks the blue collar/white collar binary "to correct a deficit-oriented perception of entire occupational categories and, hand in glove, to appreciate the degree to which powerful techniques and strategies of mind and body are manifest in a wide sweep of work." Thinking that these two types of jobs require different physical and cognitive abilities keep us from perceiving "commonalities in the way different kinds of work actually get done at the level of immediate, day-to-day practice" (Rose, 2004, pp. 148–149). While representation matters for recruiting Black women into STEM, representation will not save us. Understanding the whole self includes understanding one's own literacy work history in relation to new opportunities. Low-waged work has been used to keep Black women down; now computer code bootcamps wish to help them escape that labor. That history of low-waged work cannot be separated from computer programming; it is literacy work history with low-waged work that can help us reconstruct what the so-called pipeline into computer programming involves. This chapter addresses tech sponsors' construction of Black labor as low-waged work as experiences that do not mesh well with their professional standards. I draw tighter links between the Black adult learners' literacy work history practices and the coding literacy they profess to learn from Clearwater Academy in this chapter.

I argue that low-waged, contingent, and often gendered work has taught Black women first-hand the kinds of relationships they need with labor and

literacy to upgrade their lives. Low-waged literacy work gives Black women opportunities to survive and do carework, but it does not allow them to obtain the promises and opportunities of literacy to help them thrive more fully as Black women. They develop a set of work values that labor markets must follow: flexibility, more time with family, and more chances to be resources in their own communities. These desires from literacy work practices gives them full access to their minds, bodies, and spirits. Rather than understanding their "best opportunities" as divorced or having nothing to do with tech, these Black women find Clearwater Academy a useful and relevant bridge—not a conclusion—over into a different relationship with labor, one in which they are not exploited and abused, one that may allow them to respect their lived experience as an important addition to literacy work. They uphold Clearwater Academy and coding literacy to a high standard for their return on investment.

In this chapter, I show that literacy work history reveals the ways Black women construct their work ethic with labor and the economy to humanizing ends rather than what serves technocapitalism. The Black women's knowledge and experience in this chapter further exemplify Black feminist thought's intellectual contributions to empowering Black women against intersectional oppression while re-envisioning what counts as knowledge (Collins, 2009), but in the context of computer code bootcamps and the tech industry. The chapter then responds to ongoing calls that everyone should intentionally listen to Black women (Mckoy, 2021) in the tech sector (O'Neil, 2023). They provide antenarratives that could change the trajectory of technocapitalism. Their Black coding Discourse about work and digital literacy demonstrate what values drives Black people's laboring with computer programming practices for community and family.

I also argue for a methodological contribution to workplace literacy and computer science. My documenting Black women's literacy work history in this chapter came by accident. Between spring and fall 2017, I spoke with all 12 participants about their *literacy history*, an interview method that captures direct accounts of how literacy "courses through people's experiences, acting in concert with historical trends" (Vieira, 2016, p. 138). Literacy studies scholar Deborah Brandt made this method popular with her book *Literacy in American Lives* (2001). Literacy history interviews have been significant for understanding how literacy practices develop in marginalized communities in response to the shifting tides of the macro-level economy, racist policies and laws and civil rights, and personal encounters with literacy ancestors (Lachuk, 2016; Miller, 2016; Pritchard, 2014, 2017; Vieira, 2010). In 2020, I reported on the literacy histories of four Black men who attended Clearwater Academy during spring 2017 (Byrd, 2020). They often associated learning

digital literacy in school with racism while remembering tinkering with computers more fondly; this part of the larger study articulated how so-called resource-poor communities have rich digital literacy practices that complement coding literacy. However, the six Black women's literacy histories had no such significant associations: a couple incidents here and there, but nothing that could justify a thorough accounting of their schooling. And then, four years later, I revisited those women's literacy histories and found nestled within their stories detailed accounts of the kinds of jobs they had, the circumstances that led them to those jobs, the workplace conditions they navigated, and the impact the work had on their family life. I call these accounts *literacy work histories*.

In this chapter, "literacy work" means the literacies people possess to show their worth in direct tension with conventional, often white and patriarchal centered views of who is a valuable worker. I don't use the more well-known term "workplace literacy" because that narrows literacy practices to your profession or career. Literacy work helps me understand that any literacy practices a person has at any point in time in any situation can be chosen as valuable forms of human capital (Watkins, 2015). "Literacy work history" details the many ways literacy practices have been deployed for human capital over time according to the shifting tides of work ethic across multiple points of labor.

Unlike literacy history interviews, literacy work history interviews explore how Black people's literacies get purposed and repurposed in the economy and how Black people then construct meanings about labor in response to these changes over their lifetime. Incidents that happen in the workplace – across many professions and/or positions -- reflect sociocultural values of how literacy should be used in the economy. These values also reveal how gender, labor, and race interact. These incidents lead Black women in this chapter to assert their agency over their working lives, inevitably changing the trajectory of their literacy lives in the process. A literacy work history interview digs deeper than what any résumé or cover letter can describe about those same people; their stories in these interviews describe motivations and feelings about literacy and labor that guide their twists and turns from one position to the next and what they desire as Black women. Literacy work histories answers how Black women construct work in the United States and how that construction folds into expectations of laboring in the tech industry.

Because the six Black women I interviewed shared their literacy work history while talking about their longer literacy history, I had no protocol for asking about these lived experiences, no plan to go as deep as they had gone. Semi-structured interviews lend themselves to flexible conversations. While I may go into a study with a set of questions and topics I would like to ask, I let the participant take their stories in whatever direction they wish, as it's in the

confines of our topic. Listening and empathy, I think, matters in interviews, so when participants describe stories of vulnerability and heart break, I must lean in closer and not interrupt what I think is a side story to my intent and purpose. Some participants' literacy work histories are more detailed than others, but I find meaningful threads about family life, literacy, and labor that reasonably link together. Literacy work histories extend back to these Black women's childhood experiences with learning how to read and write and back to their digital literacy instruction in their homes and in their schools.

In the following sections, I describe how and why conditions of work and different kinds of jobs changed throughout Black women's literacy work histories. Race and gender oppression over time culminates in their developing a work ethic for professional life that they expect tech to fulfill. I first explore the work ethic Black women learned from three different sites of training: school, home, and their own exploration of computers in different situations. I show how Black women lost significant gains in their literacy practices in high school. Several life choices pushed these Black women off track from the grand narrative for American education. Contingent, precarious, and gendered work reached up and caught them for survival. These jobs taught participants that their work was worthy of reward even though employers and colleagues disrespected their literacy work practices and their very existence. Work conditions took advantage of their talents and frustrated their well-being and family life. Still, these Black women produced dynamic literacy work practices out of these difficult conditions. At work and school, they are close yet far away from digital literacies as they make choices in response to those changing conditions. Then I discuss how Clearwater Academy should, for these women, be an answer to their literacy work history in two ways: first, they make a bridge between their literacy work history and Clearwater Academy; second, Clearwater Academy itself is meant to be a bridge to flexible literacy work, leaving time for family and community. Tech isn't a conclusion but a steppingstone to more personal goals for life and labor in these Black women's lives.

Work Ethics Across Home, School, and Private Playgrounds

Although I describe and analyze six Black women's literacy work histories, I begin with their childhoods across three different locations: home, school, and what I call their private playgrounds where self-directed study of literacy happened. Our literacy work practices develop long before we are eligible for employment at the minimum age of 14 in the United States. Evan Watkins' observations about literacy, education, and work inform my thinking here. Watkins (2015) argues that people aren't just a bundle of literacy uses

and experiences; they are potential assets for the economy. Schools do not shepherd us toward democracy or other literacy myths; schools have been "conscripted instead into the making of literacy subjects" (Watkins, 2015, p. 30). I would argue that households and the private playgrounds we create for ourselves set us up for conscription into economic productivity. Turning all parts of Black life into contributions for the economy was the leading logic for Black women's enslavement in the United States, a history I summarized earlier. Unlike the 19th century, recruiting all parts of Black life into capitalism for white supremacy feels more subtle in the 21st century. I show that Black women in Clearwater Academy had little experience with computer programming in childhood. But their interactions with digital literacy taught them desires for meaningful engagement with literacy work that gives personal fulfillment. To achieve this goal, I describe how Black women participants came from households and communities rich with literacy practices. Engaging with literacy across home, school, and private playgrounds taught them a set of values about literacy that they can translate into work.

Receding into the Shadows: Present/Absent Adult Families

Parents and guardians taught their children literacy early in their childhood but often later left them to read and write independently. Yet their families' approaches to parenting and teaching would still linger and influence some participants' literate lives. Myra, a thirty-four-year-old certified nursing assistant and single mother to a seven-year-old, was the oldest of six brothers and sisters. Her literacy work history interview stands out because when she answered my questions about her childhood, Myra would often say "we" to mean herself and her siblings. It was as if her childhood literacy learning was a communal experience, and Myra was the designated archive of her siblings' literacy histories. Many family members played a significant role in Myra's learning in community with her brothers and sisters. They were the children of a stay-at-home mom who made them practice multiplication tables from their older cousin's math textbook; their aunt would turn the volume off on the television and make them read the captions, much to Myra and her siblings' annoyance. Their grandmother instructed them to write their names over and over to practice good penmanship. Out of these family members, Myra remembered her grandmother describing the consequences of literacy for their lives. "Don't nobody like anyone with bad penmanship but doctors," Myra recalled. "If you gonna be a doctor, I'll accept [that]. But until then you gonna write perfectly in the lines." Practicing penmanship wasn't just about penmanship; Myra's grandmother taught penmanship to teach that their literacy reflected her and her siblings' reputation and that they needed discipline

to succeed in life. These lessons would follow Myra well into her adulthood. Here's a brief exchange between myself and Myra after she had finished the penmanship story:

> **Myra:** And to this day I write directly on the line.
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> **Antonio:** Really?
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> **Myra:** I do not write outside the lines; I freakout.
>
> **Antonio:** Because you've been drilled.
>
> **Myra:** I've been taught that. And I've always been told that your name is all you have. So respect it. Yep. That's my family. It wasn't bad; it was discipline.

Myra and her siblings also picked up learning through repetition from adult family members. When they helped their grandmother cook in the kitchen, Myra and her siblings read to her the correct measurements from recipe books. "And if she ask you something you better re-read it," Myra recalled. "You know it, she told you fifteen times. That's why my memory is so fresh. I remember shit. But people don't remember." That learning by repetition blossomed when Myra and her siblings were left to teach themselves. In fact, other than the few memories she recounted, Myra remembers teaching herself how to read or her siblings teaching each other the most. Her older brother would take on the mantle of learning through repetition. Each day after school, Myra's brother gathered everyone to read and then recite the Shephard's Prayer (*Contemporary English Version*, 1998, Psalm 23). To help with memory, Myra's brother made everyone write the Prayer "a hundred times." The Holy Bible has many memorable verses but Myra's brother thought the Shephard's Prayer was the one to know if they remembered nothing else. Emphasis on learning through repetition turned out to be a valuable literacy work practice in adulthood for Myra. As a bartender, she could sling drinks quite easily for customers: there were few cocktails she didn't know, and her manager was amazed telling her, "You fast, you quick. You remember shit."

The *absence* of adult family members can have as much influence as their presence. Zelda, a twenty-six-year-old unemployed single mother, recalled growing up with a hands-off mother. She was disappointed that her mother never encouraged, or forced, her older brother to pursue a bachelor's degree in computer science from Cornell University. He had not even applied to the prestigious college. Instead, the university *invited* him to attend. But Zelda's brother wanted to attend college in Japan. Their mother let him decide for himself what he wanted to do with his life. After the university in Japan rejected his application, Zelda's brother swore off college completely. Zelda took notes from

her mother on how *not* to raise a child. "Parents are supposed to push you forward," Zelda said during our literacy history interview. "Parents are supposed to guide you. But that's not what's happenin' to my daughter. Forget that." Yet Zelda's family believed in natural talent for learning on one's own. She recalled her parents buying a home computer for the household, but then did little more than teach Zelda and her siblings the basics and then just walked away. "They showed you once," Zelda remembered. "They showed you how to access something. Showed you how to do something. They only showed you once. If you didn't get it the first time, it's not meant for you." The advice suggested that learning came naturally, or that a concept was so thoroughly taught once, it need not be taught again. If you don't get it, the fault belongs to you, and you should quit. This advice resonated throughout Zelda's life well into high school and in learning computer programming at Clearwater Academy, as well. Zelda believed she shouldn't have to study coding often; if she had to study often, computer programming probably wasn't meant for her to learn.

In this first part of the section, I'm establishing the lingering impact of absent adult family members in the literacy learning of these participants; what presence they did have helped them establish important philosophies for how Black women should orient their minds toward discovering the world as learners: literacy as a collective experience; literacy as an access point to emotional and intellectual growth; literacy as a tool for Black feminist agency. These beliefs would develop into a work ethic for learning and using literacy work practices. Other than instances like these across their lives, adult family members mostly receded into the shadows as participants got older. For example, Alice was raised by a single mother who had to work all day to provide for her children, so she wasn't around much to assist in her learning; Halima, a Sudanese refugee who came to the United States at age five, grew up in a two-parent household but neither her mother nor father knew English well. Her mother wouldn't learn English until a decade after arriving in the United States. In their absence, families tended to create home environments that encouraged self-directed literacy learning or exploration of digital literacy with others. Adult family members purchased the materials and spaces needed for their education, such as books, computers, and internet access, and then they left their children to learn reading and writing from those materials, from schools, and then, unknown to these parents and guardians, from the private spaces their Black daughters and granddaughters created for themselves.

You're on Your Own Now: Conflict and Agency

When left to their own devices, Black women adult learners attending Clearwater Academy extended values of literacy learned from present and absent

adult family members. In their private playgrounds as children and teenagers, the Black women adult learners practiced and developed new kinds of literacy work. But they also reported conflict between the literacy work practices they explored privately and what they were taught in school. Educational institutions, as asset-building training grounds for the economy, possessed more power over defining what literacy work practices would be available to Black women after graduating from high school. In this section, I show the circumstances that led these Black women adult learners to create private playgrounds, and the conflicts and influences school had on their beliefs about literacy work practices.

Rania was one of two Black women in this study born before the Civil Rights Act of 1964 and the Voting Rights Act of 1965. She was born and raised in the Midwest but traced her family roots back to the Deep South. Recounting her literacy history at age 55 in 2017, Rania developed her private playground of literacy learning in response to domestic abuse. She didn't remember much reading in her household, but she remembered writing. A lot. Every time her father got mad or abused her mother, Rania turned to paper and pencil for comfort. "I used to write, write, write, write," she explained to me. "That's all I did. Just write. Just copy stuff. I really wasn't reading. I was pretty much just writing, doodling. Writing everything I saw." She did recall not hearing her father encourage reading books. Instead, he used literacy to isolate Rania from him: "The only time he said go read book is when he got mad at you and wanted you to get out of his face or something."

Rania took advantage of that isolation when she was twelve or thirteen and wrote poetry and fiction to process her feelings about the abuse. She wrote on any paper she could get her hands on, including mailing envelopes. In high school, Rania worked to help her mother and father with bills, but she kept a little for herself to eventually buy a Brother typewriter. She moved from writing on paper to writing poetry with mechanical ink. In her private moments with literacy away from parents or teachers, Rania began to think that maybe creative writing could be her career, that words could be her trade. She thought she was pretty good at creative writing, after all. But school—another space of learning literacy work practices—ruined her dreams. Teachers thought this kind of literacy work wasn't suitable for Rania. She recalled that "one of my teachers had told me I wasn't good enough. And I never pursued anything. Talking about the way I talked. Talking about talking country. They didn't understand you might talk a little different because your parents grew up in the South. You in the inner city. So of course my language—I didn't grow up around white people, so my language is not gonna reflect that." Between that discouragement and growing up in an abusive household, Rania felt less confident in her literacy practices, that "you always feel like you weren't good

enough." These feelings followed Rania through her literacy work history and her sporadic college education. Yet she would never let go of creative writing and drawing: over the course of her life, Rania still maintained disciplined interest in these literacies, turning personal interests into dreams of a professional life. At Clearwater Academy, Raina wanted to write and draw an illustrated book that taught children about domestic abuse. I detail later how these literacies sat on the margins while she had to jump from low-waged job to low-waged job before coming to Clearwater Academy.

The private playground Rania created for herself is different from Alice, Zelda, Myra, and Halima. These four Black women are the children of the late 1980s and early 1990s. They grew up when the internet became widely available in households in the United States. Scholars and journalists have already documented how invaluable the internet was to Black people during the late 20th century (Banks, 2006). Early versions of social media platforms like Black Planet and Myspace in that history also appear in Alice, Zelda, Myra, and Halima's stories. What they describe in their literacy histories, then, will look familiar but in the context of literacy work history, they show a work ethic for digital literacy not accounted for in their public schooling. Because this Millennial generation had similar circumstances with one another, I'll focus on Halima and Zelda's private playgrounds for digital literacy learning and the kinds of work ethics they developed from self-directed study.

Halima created her own private playground for digital literacy learning thanks to two circumstances of her family environment: her parents' digital literacies and her place of birth. Halima's father lived a lavish life in Sudan. He owned a successful restaurant, a very big house, and had several mistresses. He hired maids and nannies to take care of his family, and he traveled a lot. But then the Second Sudanese Civil War broke out in 1983, and Halima's father lost all his money a few years later; he still owned the restaurant, but he couldn't do anything with it. His social status diminished. A refugee living in the Upper Midwest, Halima's father bought a computer for the household. In the United States in the 1990s, computers and the internet meant you had power, and Halima's father wanted to reclaim some of the power he had lost in Sudan. The computer was a status symbol for her father, not a practical tool. In the off chance her parents wanted to use the computer Halima had to help them navigate the interface and type for them. As for Halima's six siblings, they had no interest in using the computer either; she was the middle child, so her brothers were too young to bother with computers and her older sisters had other interests. As far Halima was concerned, the family computer belonged to her.

With family occupied with other concerns or interests, the computer and the internet guided Halima's digital literacy learning in the fifth and sixth

grades. When her family first got a monthly subscription to America Online (AOL), Halima taught herself how to get on the internet. "I'm more of a learn how to, ya know, adapt … I'm somebody that adapts to things," Halima explained. "Of course, I might not know how to use it, but I figured it out some kind of way." Halima eventually accessed AOL Instant Messenger chatrooms and met strangers who knew HTML and CSS. When she saw their custom websites, Halima wanted to learn more. "So they were actually sharing little HTML scripts, like code, to put on to your own page, and make it do this and make it have flowers and all that," recalled Halima. "It took me like a month or two to build my own website."

Despite the excitement of creating her own websites, Halima pursued other interests in middle and high school, such as drawing and the cello. She insisted on writing for the middle school newspaper to expand her English. There was no special treatment or support for the English language learner. Teachers "gave me the same assignments as everyone else. And I was expected to live up to the standards as everyone else. And I did." She would continue this kind of labor into high school, too, writing "simple stuff" like movie and theatre review articles and announcements about upcoming athletic events. She never considered herself a good writer or a sufficient English speaker, but Halima pursued writing, and other extracurricular work, because she was "trying to see what I could do."

As a Sudanese refugee in the United States, stuck between the prejudice of white people and misunderstandings of Black Americans, Halima certainly had a different perspective on education in her new home country: "People don't realize the opportunities that they have here in the United States," Halima explained. "And I guess I try to take advantage of that. Writing and taking fencing, orchestra." In childhood, Halima always complied with the expectations of superiors, whether that's other coders showing her how to learn website design or following the standards for effective newspaper writing. In her private playground, Halima appreciated the opportunity to explore what's possible. Her time with the computer would be a forgotten memory until well into her adulthood at age 32, when the work ethics of digital literacy would come rushing to her again at Clearwater Academy.

Zelda's father was a well-off electrician interested in learning new technologies. He started his own company in the 1990s and made enough money to own a building across the street from his house where he could work. Her mother was an accountant and had an office in the building. When the internet and first computer came out, Zelda's father jumped on the opportunity, buying computers for the office and a computer for the house. Zelda's parents spent their days across the street working, leaving Zelda and her siblings to do what they wanted on the home computer. Even when her parents came

home, "they barely used that. They had their own computer in their office … That was our computer." Other than showing them how to learn something once, as mentioned above, her parents had little to do with Zelda's digital literacy learning. The physical distance of her parents, their sociocultural value of learning, and the proximity of the computer all contributed to Zelda commandeering the computer for herself.

Zelda picked up web design and what I call social manipulation from her self-directed study of computers. She remembered her first computer was an IBM and she and her siblings played a lot of games, like *Minesweeper*, *Frogger*, and *The Oregon Trail*. By age eleven, Zelda was on Myspace. The moment was inspirational because she could design dynamic webpages. Her personal page was "poppin'! I had my own background; I had it custom! Had the music playing!" Her Black friends, however, wondered why Zelda wasn't on Black Planet instead. Zelda's cousin was "better with computers" and showed her how to use the social networking platform designed for Black users. Zelda also learned catfishing from her cousin—the social manipulation, I mention at the start of this paragraph. She remembered she had gotten Black Planet at age 13 because around that time she started manipulating a boy on the website. The motivation had less to do with her own self-esteem: "I wasn't ugly," Zelda clarified. "I just wanted to be this older person who's like—I don't know. Perfect. I didn't know that was catfishing at the time though. I was thinking, 'If I really want a guy who I like to talk to on Black Planet why not I just pretend I'm his dream girl or something?' Or whatever." Zelda used her invented persona to attract this boy who lived in Chicago. After two months pretending to be his dream girl, Zelda confessed who she really was. He took the news well, and they started a long-distance friendship that was still going strong 14 years later when I interviewed Zelda.

Leveraging digital literacy learning for socializing was Zelda's most valued literacy practice. Zelda designed and edited photos in her spare time when Facebook became available to non-college student users in 2006. Zelda joined the site immediately but was let down by its restrictive design. She said that "Facebook is stupid; they don't let you customize anything." Yet she relied on Facebook heavily to plan hangouts with friends, after Zelda's father took her phone away. She was the first of her friend group to get a Verizon flip phone when she was sixteen years old. It had a rotating camera and she remembered listening to Kanye West's 2004 *College Dropout* on it. A lot. Somehow putting that album on repeat every night for several hours racked up a five-hundred-dollar phone bill. "When I lost my phone, I used social media a lot," Zelda recalled. "Because I didn't have anything else to do. I was bored." They all enjoyed smoking weed, so "even if we didn't have cellphones and stuff, we'd hit each other up on social media. 'Hey, you gonna meet me here. You gonna

come over? Dadada …' I invited those motherfuckers over to my house." Social media, Zelda thought, was her favorite part about computers. In a world where any literacy practice can be an asset for the economy, Zelda used social media as a work ethic: appeal to people whether near or far to convince them to take a deal: hangout and smoke weed. Have fun. Facebook profited off her socializing, but Zelda benefitted as well, later transforming those experiences in her private playground into a career in digital marketing.

Unlike these Black women's private playgrounds, schools had the least imaginative ways of using digital literacy. While Rania and Rosie grew up with trace paper, pencils, and typewriters before they used computers on the job, the Millennial Black women could only remember typing in school. Other than Alice who enjoyed typing, even writing book reports for her older brother, most participants found typing a dull experience that added little value to their digital literacies. Zelda never did her homework: one reason was that she comprehended and learned concepts from class, a call back to her family's belief that if you don't understand something the first time, it's not for you. Homework was for anyone who didn't get the lesson the first time around. Zelda refused to do any homework that required typing because she didn't see much value in the skill. In her freshmen year, Zelda's high school offered a computer class that taught typing, but she questioned why anyone would *want* to learn to type fast. In high school Zelda spent more time creating PowerPoint presentations, but she preferred to write on paper because it kept her present and close to her ideas. She would have someone else type out the work. This practice Zelda took with her during a short stint in college right after high school graduation. Social media. Designing on Myspace and Black Planet. Playing with Photoshop. These digital literacies had real value to Zelda, not the constant typing of words that her teachers emphasized. Even paper had more value for its material feel and the way it challenged her mind to remember the content she wrote.

Myra experienced the same typing lessons from elementary school to high school and hated it a lot. She didn't appreciate that her high school teacher argued that typing was the preferred work for women. At first, Myra remembered that he wasn't explicit about this work ethic for women; she could tell from how he "treated the girls and treated the guys" in class. But immediately after mentioning this detail, Myra recalled a specific moment when her computer teacher was more explicit: "Because I have to think about it. When I first started learning computers in class, that was in the 90s. And we had a computer teacher who was like, 'Women are supposed to type.' … Yeah, that's what their jobs was. Secretaries, administrative assistants." Her teacher's argument that typing is women's work echoes in the work experiences of other Black women in this study, across generations. It's reflective of class, too:

Black women qualified for temporary or relatively low-income jobs. This perspective links literacy work in school with actual work for these Black women; granted, other life circumstances shaped what literacy work was available to them. Myra noted the irony of the coursework in high school. While the computer class teacher taught only typing, her English teacher—a Black man from Philadelphia with a background in computer science—taught her the ends and outs of how computers worked, from software to taking apart the hardware. However, the teacher did not teach computer programming; Myra encountered that while designing her Myspace page.

I suggest work ethics about digital literacy begins in childhood from home, school, and their own private literacy playgrounds; if we are all potential assets in a capitalist world, Black women in this study learned early the value of work and the discipline necessary to do well. What comes out of their collective experience is learning and exploring literacy for personal fulfillment, curiosity, and connections with others. This kind of work ethic pushes against narrower yet powerful conceptions of digital literacy in schools. Teachers confine human expression to typing, packaging words into different forms—Word, PowerPoint, Excel—and offer little to no opportunities for using computer programming for human expression. In addition, the specter of administrative work as suitable labor for Black women perpetuated that narrow believe of what work these women could do. Coding is for boys and men. However, the relationship between school and private playgrounds reveal the rich knowledge Black women bring about literacy and work, knowledge they bring to Clearwater Academy as a bridge into opportunities they desire. The "best opportunities" have significant traces for shaping philosophies on "working while Black." Humanizing practices with digital literacies continue to echo for these Black women as they take these experiences with computers into the racial and gendered conditions of work.

Never Finishing Literacy Practice, but Always Coming Back

The grand narrative of opportunity in the United States tells Americans that they can leverage education as a pathway to success. Children attend school through twelfth grade and earn a high school diploma. Then, as newly minted adults, they go to a good college. With a college degree in hand, they compete for and eventually win a good paying job. Their salary and benefits help them start a family, own a home, and plan for retirement. The realities of intersectional oppression and matrix of domination undercut this story of success. While intersectionality explains how oppressions can intersect across identities at the same time (race and gender, for example) (Crenshaw, 1991),

matrix of domination suggests that this oppression organizes power in society (Collins, 2009). The grand narrative of opportunity tends to work most often for white, straight, able-bodied Christian men possessing a particular kind of social and cultural capital associated with middle class, or higher, status. Black women's literacy work histories exemplify how organized principles of racism and sexism influence their labor with digital literacies. While participants were on track following this grand narrative early in their lives, they faltered and dropped off the path as they approached high school graduation; circumstances both within their control and the result of racism turned some Black women at Clearwater Academy into perpetual returning adult learners. In this section, I address participants' efforts to acquire quality education for quality literacy work. It sets up the consequences for falling off track: finding contingent, low-waged work. On the flip side, these six Black women's lived experiences create a foundational philosophy that leads them to attend Clearwater Academy and accept computer programming as key tool toward fulfilling their work ethics.

The Black women participating in this study recount multiple ways of being a returning adult learner—someone who leaves educational institutions but try to get back into the classroom later in life. The circumstances for leaving high school or college varies, some personal choices and others due to circumstances beyond their control. Whether the mistake of an academic counselor or for a different unknown reason, Zelda had missed taking a required history course in the ninth grade; she needed to complete the class as a junior. Zelda's parents were divorced by this time, but she didn't live with either one of them. So the school required that Zelda have all teachers write and sign a report to prove she was attending class. Her ninth-grade history teacher was a white woman in her first-year teaching. One day Zelda and the history teacher got into it. "She was literally writing like—all she had to do was sign it and write a couple words," Zelda said. "She was writing a story. Like 'She was not paying attention in class all class. She was doing other class homework and dadadada' which … Okay. If she would've wrote it quicker, it would've been great." But Zelda had to turn in a paper before racing to catch the bus home. Annoyed, Zelda tried to snatch the paper, and the teacher slapped her hand down on the report. Zelda lifted the teacher's hand up, took the paper, and walked away. "Because I was tired of her treating me like—she treated me like I failed ninth grade history, and I didn't. I just never took it. I took literally every other history class. I took history for seniors, but ninth grade history is a requirement to graduate high school. So she treated me like I was this dumbass kid who failed it." But after Zelda snatched the report away and left, the teacher had permission to do more to make Zelda's life miserable: she reported Zelda to the principal and claimed that she had pushed her. The

school expelled Zelda for a year. When she returned, Zelda took her High School Diploma Equivalency (HSDE) and graduated early.

Reflecting on the teacher's motivation, Zelda suspected that racial bias played a significant role in the incident. "She felt intimidated or something," she explained. "She probably already thought one thing. Like 'Oh this Black kid is taking this class because they're bad and dadadada and blah blah blah.' It's like, dude, I have a 3.8 GPA. Are you fucking kidding me right now? It was bullshit. I was so mad. I'm still mad to this day." Zelda had done everything right in school; she went above and beyond the expectations of school-based literacy learning but encountered suspected racism, which slowed down Zelda's own journey of achieving self-actualization, her full creative and spiritual potential (hooks, 1994). Her experience and my own analysis support prior research in Black Girlhood Studies and literacy studies that consistently shows how school administrators and teachers unduly punish Black girls to control their behaviors and femininity (Carter Andrews et al., 2019). Schools continue what the slave institutions established for enslaved Black women: Zelda arrives on campus with rich literacy practices and a determined sense of self, only for schools to deny these essential resources for her well-being in school.

Myra and Alice also fell off track in high school, but they both went on to try college after graduating. Alice took night classes to catch up on missing high school credits and get her HSDE. Myra said she fell behind and dropped out of high school after her grandmother passed away, but, like other participants, returned to finish her diploma with no pomp and circumstance march. Higher education was a different kind of challenge for them both. Alice spent just one semester at a community college: "I ended up withdrawing due to, like, first of all, I think I overloaded myself," Alice recalled. "And, secondly, I wasn't taking it really seriously as I should have. I ended up just withdrawing from that semester of class. Like I finished the first semester, but I ended up withdrawing for second semester." Myra majored in social work and psychology. She did a year but then "fell behind" and admitted that she wasn't "focusing" on college. Myra went on to low-waged work to support her little daughter, but she had dreams of going back and trying again. After graduating from Clearwater Academy in Fall 2017, Myra had planned to start the new year fresh with a return to community college. She just needed to "get my appeal letter together, because I flunked a class, so I gotta get my appeal letter together, but I'm gonna go back and finish it." Meanwhile, Alice would try another route to stay connected to college. Sakowin University had started an adult education program called Journey. For one academic year, low-income working adults could take humanities night classes. If they finished, adult learners would get college credit that could transfer towards a degree in the

university. The opportunity to go back to college after failing so much was, as she wrote in an application for a grant that would cover some living expenses while attending Clearwater Academy, "revolutionary." Alice went on to write:

> Ever since I was told my application to the program was accepted, I have felt nothing but encouragement. Each time I say that sentence aloud (or in my head) I fight back tears because it has tremendous value to me. Just the thought of two highly intelligent and university educated individuals [teachers responsible for admissions] who believe that I am "college worthy" was all I needed to set out on my very own [journey] to education. … I dared to dream (again) that I could become a first-generation college student.

Finishing college was a priority for fifty-eight-year-old Rosie, as well. She dropped out of high school to work and support her family. She called that part of her life "a little detour" before returning to high school for her General Educational Development (GED). While she worked as an office clerk, Rosie took college courses in information technology (IT) off and on at the same community college that Alice and Myra would attend years later. The classes taught her the "A to Z about computers. How to repair them. To do tech support type things. Say if I were in a call center someone needed help with a … How to make this work, or that work. We learned how to go through the scripts and the software packages that they had available. Go through that piece." Rosie nearly finished her certificate in IT before starting Clearwater Academy. All she needed was an internship. Perhaps Clearwater Academy's connections would be a pathway toward completing that requirement.

These Black women are not content with the paths their lives took toward the end of high school and after. Alternative education programs help Black women retool (upskill) their literacies for a different kind of relationship with labor: Journey and Clearwater Academy provide faster, accessible, and affordable literacy sponsorship (Brandt 2001) that help these Black women get three or four steps ahead and get back on track with their lives. Ironically, people like Alice go to these programs because they tried to follow the grand narrative of school-to-work/career and encountered poverty, racism, and healthcare challenges, stuff that knocked them out. Short-term training programs in workplace literacies take advantage of racism and poverty to get working adults back into to the economy but under the risk they perpetuate helping different industries exploit marginalized people's labor. Black women, however, come with lived experiences that help them assert the kind of labor and education they want, circumnavigating or undermining these efforts to exploit their literacies and coding literacies for a labor market.

What Literacy Work Conditions Teach Black Women

Stepping away from the grand narrative of education led Black women to navigate contingent low-waged work. Often, these jobs looked like "women's work." For example, the literacy work histories detailed here include experiences in retail, banking, office administration, and nursing assistantships. Many circumstances made these jobs temporary or subject to ending in a short time. Halima worked under a six-month contract in IT support for faculty at Sakowin University; Alice spent her entire professional career in banking and even received a modest promotion, but company mergers pushed her out of these positions. Black women in this study got the message their working lives were easily replaceable, temporary, and out of their control. Moreover, their lives as single mothers didn't fit neatly with their jobs' expected literacy work practices. In some cases, employers were unsympathetic to their parental responsibilities. Jumping from job to job, moving from place to place, risked these Black women's lives; a new start didn't always guarantee a balance between literacy work, labor, and motherhood but rather a continuation of oppression. In this section, I explain these literacy work conditions and how Black women tried to navigate them to regain respect as literate subjects while taking care of their families. Rania and Halima gave the most detailed window into their literacy work conditions, so I focus on their stories here.

Rania accrued plenty of credentials after high school: a year of medical assistance, certificate in pharmacy tech, domestic violence credential, and a certificate in teaching middle school and high school students. Yet these credentials gave Rania access to low-waged work that was often unequipped to address her domestic abuse. Rania loved her job in customer service for a big, well-known insurance company based in the Midwest. But the domestic abuse of her childhood had followed Rania into adulthood. In the early 1990s, Rania gave birth to her second child—a son—by Cesarean section. The doctors didn't resew her properly, so Rania had to go back to the hospital for a second procedure. While finishing up her medical leave from the insurance company, Rania's partner suddenly decided to move the family about an hour's drive south of work. "And it's like 'Really?'" Rania complained. "He knew I had to go to work so why would I be pick up then to go out of town? And he didn't show up and I was scared to leave." So Rania decided to not return to work, for fear of her and her children's safety. She called her office and left messages about what was going on, but they fired her anyway. Rania suspected that "they wasn't into domestic violence and didn't know how to help people." Being a victim of domestic abuse reduced Rania's value as a literate subject. The workplace could not protect her humanity, but they were well prepared to extract what knowledge they could from Rania.

Because she already had to stay home and take care of her children, Rania got a daycare license and tried family daycare for a while. And then she returned to the office in 1996, this time working in banking operations. In this position, she answered external and internal calls and prepared and researched checks for customers. Rania loved that job, too, because she could directly serve people, but once again domestic abuse blocked her literacy work practices: "I was getting harassed at home plus harassed at my job. So I left [that bank] even though I loved my job." She tried to transfer to a different position in Sakowin with the same company. By then the bank was in the middle of a merger, and Rania believed "they don't want to hire no Black person." She had no job lined up in Sakowin, but she moved to there anyway. Rania believed she had "to keep running and you know when you're young and you don't realize you got to get rid of the problem. If you don't change something, you still gonna be stuck. I didn't know that then." Rania got a certificate in pharmacy tech that she later parlayed into a job with Walgreens. But Rania was reluctant to take it. She would be working nights, and she was just "scared" to leave her kids, even if they had a caretaker while Rania worked.

Halima faced similar concerns about balancing family life with the demands of literacy work practices in her own history. She once worked as a case manager for an insurance company in Sakowin. The position for special case manager later became vacant, so upper management asked Halima to take the promotion. She really didn't want to, even though the promotion was a sign that the company had recognized and valued her digital literacy work practices. They even offered a significant salary bump. No wasn't an option: "If you don't take this promotion, you're gonna get fired," Halima recalled. She had been coerced into becoming a stronger asset for the company, but the new position left her family life out of focus. "It was so hard for me," Halima said about the schedule change. "I had to go from 7:30[in the morning] to 4 o'clock [in the afternoon] to working 11:30[in the morning] to 8 o'clock [at night]. And this was so terrible because I had to get my two kids somewhere to be when I'm not there. So I had to get daycare providers because they were still young so not school-aged level. I had to pay even more. I had to pay the daycare provider more money." Thankfully Halima negotiated switching work schedules with a co-worker. She had begged him for help, but he didn't need much convincing: just the fact that she had to take care of two kids was enough for him. Halima thanked the co-worker with a fifty-dollar gift card to Best Buy and took him out for drinks at a local gay club. Without his help, and not the help of the insurance company, Halima would have to minimize her raising her children directly, shifting that responsibility to a paid stranger.

Rania's worth as a literacy subject depended on having a stable home. Lacking resources to address her personal life circumstances hindered Raina

from doing required literacy work. Immediately, Rania became less valuable, as it's easier to get a different literacy subject with a good household than struggle with one who doesn't. Meanwhile, Halima's story provides a different lesson: if you do make work a priority, you may lose your time with family and their well-being. The labor market, then, can favor "normal" family life over others, namely some support waiting in the wings while the mother works. Labor markets may push out single Black women from important opportunities that allow them to leverage literacy work into reaching their full potential. Even the "easiest" low-waged work can be *inflexible* to their needs. Black women participants learn that their domestic life has no place in the workplace. They witnessed and experienced how literacy work disrupts family life. Coding literacy, with its cultures of flexible work, may break that generational experience and offer a match between what they want for tech and what they want for life.

As they took on vulnerable work, Black women participants also reported varying kinds of literacy work conditions that shaped how they understood their relationship with labor and thus how they understood what work ethics mattered for literacy work practices. Remember Rania again: She knew abuse in childhood and abuse in adulthood. Now, in her literacy work history, she recalled *professional abuse*. After her declining a pharmacy tech job with Walgreens, Rania jumped at the chance to work as a receptionist for a social services nonprofit. She got the job because during her interview Rania's ankle bracelet got snagged in her stockings. She had "kept my legs crossed the whole time. And that's why I got that job because they said if I have that much patience and discipline—because I had to have somebody unhook me after the interview. So that got me the job. 'If anybody could not show that on their face through an interview, then we want you.'" But Rania did not have patience for the shenanigans that happened over the next five years.

First, the organization's relationships hinged on nepotism and whiteness. Rania's direct supervisor was "very abusive and annoying." He would take forever to get back to the office and cover the front desk so Rania could take her lunch break. He would ask Rania into the conference room "just to cuss at me, and I'm like, 'Ooo! That's not how you treat people!' And I'm grown, too. It's like, 'Really?'" Rania could not complain about this abuse, or any of the unethical work practices she witnessed, to the president of the organization. He had become quite fond of her direct supervisor because he "kissed the president's butt and did everything for the president but treated everybody else like crap. And as long as the president was taken care of, he was satisfied." Second, Rania never moved up to a better paid position as an executive assistant despite spending five years delivering expert literacy work to the customers. She had "always come to work and I smile, and I try to do my best." Rania

"loved the clients. People who came in really loved me, respected me. All of that." But no one promoted her. One strike against her was education. She had plenty of other credentials and a range of experience working with people, but she didn't have a college degree. Second, they didn't like how she talked. Rania wasn't "professional" sounding. A third strike was that she competed with a white office assistant who had less experience than Rania. They chose her over Rania for the executive assistant position. The news made her livid. "They weren't moving me up in the job. It was a dead-end job," Rania concluded. "They weren't trying to promote me. They weren't trying to do nothing. They didn't even give me a raise. And I been there five years and I think in that last year I got a dollar raise." Clearwater Academy would offer what Rania had been denied so often: A chance.

Rania accepted that her work was never going to respect her literacy work practices or even her well-being. She returned to education. Like other Black women in this study—Halima and Alice—Rania got into the accelerated humanities course Journey. She then leveraged those few college credits to jumpstart studying visual communication and media at a community college while working at the nonprofit. Rania had lost interest in her current job because they had no interest in her, and that became even clearer when the nonprofit began downsizing and phasing out jobs. They offered Rania a choice, however: work full time and abandon school or resign. School had become a hinderance to the interest of the employer. They needed Rania's literacy work practices throughout all hours of the day, what with the elimination of other positions. She was valuable but still disrespected. Rania chose school because "I wasn't about to drop out of school when I was that close to graduating. So not really. I had a year to go. So I chose to graduate. So bye-bye." Rania's literacy work history paused for a decade after she graduated. She moved to Atlanta and focused on raising her children and grandchildren.

Experiences in certain literacy work conditions taught Black women participants what they truly desired from labor, a vision for themselves that needed to be activated in some way by some educational institution. Participants believed educational institutions have a responsibility to help them access their mind and their social and material needs. Halima had a thorough understanding of the kind of relationship she wanted with work through her digital literacies. After working retail and customer service, she landed a contract job with Sakowin University's IT department as help desk support in 2014. (Incidentally, Halima got the job after completing a training program through the same nonprofit Rania worked for). The work was "so boring," Halima told me. For the first few weeks she helped college students solve simple, everyday user issues. Halima thought the work was monotonous:

"I got locked out of my account or whatever."

"Okay, here you go."

"Oh, I don't remember my password."

"Okay, I just reset it for you."

The department transferred Halima to a different office that assisted college professors instead of college students. The work was a little more interesting to her. Halima imaged computers and delivered those computers to professors and answered more technical questions than what she got from college students across campus. But there was a limit to her patience with professors. Halima expected world-class researchers to have more knowledge of computers but "they were more focused on their adult learners and everything and did not know how to work a computer. It was really, it was like so hard not to say, 'What in the world!? Do you not know that your computer is not on right now?'" But most of the time she sat in a cubicle not having much to do because work was slow. She begged her supervisors to give her more deliveries to get out of the office. Otherwise, Halima would "Check e-mail. And also at the time I was going to school at Journey. So in between all of that I was doing papers, I was writing papers. And I'm like, 'Dang, they are not challenging me. If I can write a paper, image five computers, and do tech support all at the same time, they are not challenging me.'" Halima fell asleep a couple times while on the job, and she admitted as much to her supervisor. "And I tell them why exactly I fell asleep: because I'm bored. I did everything I had to do. And I need more work." Still, Halima said she was grateful for working with computers so closely, so intimately. She just wished she could do more than what tech support offered. Something in the labor market that offered digital literacies that helped her "access her mind" in ways not known before.

If IT taught Halima desires for deeper engagement with digital literacy, the literacy work conditions before that job taught her how she would want to treat herself and be treated by employers. After a three-year stint in retail, Halima spent a few years in customer service in finance and insurance. She worked for a credit card company where she activated users' accounts. From there Halima took on more complicated literacy work practices like "going through people's accounts and answering more in-depth questions." That company closed three years later, so Halima had to find a new job to support herself and her children. That new job was in card acquisitions on the seventh floor of a building where she called small businesses to persuade them to accept American Express credit cards. Getting merchants to take American Express was a tough sell because the credit card fee to the business was so

expensive. Halima needed to use rhetorical tact to convince them that in the long run merchants would make more money.

Alongside perpetual boredom, the literacy work conditions felt confining, distrustful of employees, and exploitative. At the credit card company, Halima worked in a cubicle with just enough space for decorations, like "my stuffed animals, my beanie babies, pictures of my kids, everything like that." But over in checking, employees worked in small, tighter cubicles. They could barely stand up. Knowing what they went through changed Halima's perspective on her own cubicles. Even though she had a better set up than other departments, she began to associate cubicles with prisons. Surveillance tactics underscored Halima's feelings about being in prison. She recalled, "I can't leave this until my scheduled break. They even had us check our break time. If you … so on our phones, you know because it's a cubicle and everything, on our phones you have to logout of your phone. If you log out at the wrong time, you get written up. If you have to go to the bathroom, you have to go [inaudible]. And if you use too much of your break time, you get written up. I felt like I was in prison. And that's why I hate cubicles."

Customer service also exploited Halima's digital literacies, another feature of the prison-like literacy work conditions. Her superiors ran an assessment on her performance selling cards every two weeks. At these mandatory meetings, her superiors "would review all of my calls, and any call they did not like, I had to explain why that call did not go good. Why I did not make that sale. It was very very difficult." Apparently, Halima's recordings were great examples for training sessions with new staff. She didn't learn that her superiors were using her own recorded sessions until she was sitting in one of these training meetings. As the recording played, trainers discussed what callers needed to do and what to avoid. "So this is how people treat me all the time," Halima explained. "'They don't want to acknowledge me, but they'll use me. American Express did that to me." They fired Halima soon after for not meeting her quotas, but she guessed, at the time of our interview in 2017, that the company was still using her recordings to their benefit.

These literacy work histories show challenging and frustrating opportunities where the labor market underuses or exploits Black women's literacy work practices. On one hand, they are important assets. However, their worth as workers suits the bottom of organizational hierarchy, where they uphold the day-to-day lives of better-paid employees and supervisors with more value as workers. Low-waged work exposes Black women to exploitation and disrespect, and their social status as Black women may justify this treatment under sexist and racist bigotries. While low-waged work suggests to tech an absence of digital literacies and important sociocultural understandings of the workplace, Black women in this study uncover how workplaces dictate

what they can and cannot do with literacy work practices, and to what extent those practices help them achieve their full potential as Black women and literate subjects. Forces beyond their control sometimes create the kinds of résumés they bring with them to computer code bootcamps and the tech industry itself. Those lines on their work history hide such issues in the labor market, private industry, and the economy. It's difficult to be a valuable literacy subject when you don't have the capital that protects you, capital these Black women attempted to gain through school in early life and as perpetual returning adult learners.

In this section, I have shown the irony of possessing education and digital literacies to meet the demands of low-waged work. They accepted positions that needed to be filled but then those same employers discounted their literacy work practices and in some cases their responsibilities as mothers. The literacy work conditions they encounter –not the low-waged work itself-- appear more harmful to their financial and social well-being. But these Black women also made significant inroads in their digital literacy development despite falling off track from higher education or having a tumultuous relationship with these human capital-making machines. On the job training is commonplace, but it's the combination of learning new literacy work practices with a variety of literacy work conditions that creates a formula for imagining better futures. In the final section, I turn to these Black women's desires. The power of retrospection and forward thinking allowed them to clarify their work ethics; that is, in their interviews Black women began to see a passage to what kind of labor they desired, what they wanted out of their own literacy work practices, and how Clearwater Academy could be a bridge into these possibilities.

Coding Literacy: A Bridge, Not a Conclusion

Low-waged work and their accompanying work conditions taught Black women in this study new ways of understanding their relationship to labor. Looking back, they began to understand how their lived experiences and non-tech jobs overlapped with tech; ideating potential work helped them articulate how tech could help them access their full potential. Clearwater Academy was to be a bridge to accessing these desired work ethics. I write a "bridge, not a conclusion" to highlight how these Black women did not fully buy into the computer programming pipeline that Clearwater Academy set up as a goal for their job training. they thought of other related careers that better aligned with their lived experience and work experience. The assumption that these women, and their peers in the class, were either a best fit or no fit for the tech workplace set aside the work ethics they held for themselves. This mismatch between labor

expectations of the coding movement and what Black people wanted plays out further in Chapters Three and Four. Here I describe how Black women in this study wove together prior literacy work practices, private digital playgrounds, and lived experiences into desirable future literacy work histories. Clearwater Academy represents a culmination in these imagined futures.

Take Myra, for example: she entered the program expecting to come out as a coder, but with her background as a certified nursing assistant, she thought that would be impossible. Myra heard about Clearwater Academy from "a bunch of people." She did research on the program first and concluded, "Oh this gonna be crap." Not because she thought Clearwater Academy itself was crap; Myra said she had a long history of never finishing anything. She would return to yet another education opportunity only to quit. She assessed her skillset during our interview, saying, "Like I can't draw. I don't know what this coding stuff is. I don't know—like craziness that was going through my head." When she started Clearwater Academy, Myra struggled with web design: "I didn't know—when it came to web development and web design—I didn't know what the hell I was doing." She gave herself three weeks and if the program didn't work, Myra would dropout. But then she spoke one-on-one with Richard, and he introduced her to project management. Myra learned what wasn't readily apparent from listening to discourse about the coding movement. "When I went to like doing project management and information analyst, I was like 'Oh I do this shit every day.' So that's what made me keep going."

What "shit" did Myra do every day? That goes further back to her childhood when she witnessed how Black carework at home turned into literacy work. Myra's mother relied on the carework of her grandmother for years, until she moved out and Myra's stepfather was in prison. On days when her mother was ripping and running in the streets with men, Myra stayed home to look after her siblings. At the time of our interview, Myra's mother moved to the health department working with "people who are children and young adults who are transitioning from foster care. That's her thing." Myra also knew in her personal life the value of forming strong bonds with others. Although her mother and biological father were separated, Myra's father still came around to see her. And then he was convicted of murdering a child he had with a different woman. He was serving a forty-five-year prison sentence. Myra attempted to reconcile with her father, to patch everything over. She did what she could, explaining, "I reached out to him. I made peace with my father. Yeah, because if I didn't, I wouldn't have this healthy relationship with myself." Myra learned to develop her emotional intelligence to center herself, to center her own narrative. Myra, having confidence and respect for herself, could focus on her other family members. For her low-waged work, Myra followed in her mother's footsteps and got hands-on training in CNA.

She was never certified and wanted to continue her degree in social work and psychology. These interests turned into assisting the elderly for many years.

So the "shit" she did every day as a CNA was like project management. As a dietary aid, Myra, according to her résumé, "cared for the residents and their personal hygiene and assist them during mealtime," including "Perform light housekeeping for the residents." As a resident assistant, Myra "Provide for the daily physical care of residents: showering, dressing, and any other hygiene needs" and "Administer medication, record vitals and glucose levels in the resident's daily logs." Her position required attention to patients' bodies, mental capacities, and emotions as they followed a daily routine that made their needed carework later in life comfortable. A project manager leads a team of software engineers to hitting project goals and objectives, from start to delivery of the product or feature. It too requires careful attention to routines, the needs of team members, and strong interrelationships. Myra conceived of how foundational computer programming was to the world and she had the lived experience being cared for and caring for others that strengthened her literacy work practices as an important value to tech. Perhaps she didn't need a new set of technical and social skills, but rather a framework for harnessing past experiences into new assets.

For other Black women adult learners, computer code bootcamps like Clearwater Academy were opportunities to reignite other literacy work practices learned years before. Rania spent a lot of time away from computers at home after she moved to Atlanta. She had bought a used home computer from someone, but it didn't come with all the pieces she needed to make it work, so Rania threw it away. For the next six years, Rania had to live for her children. She wasn't really concerned about doing more with computers than what was needed at work, which was at most data entry. "I was trying to survive," she said. "Raising them. Taking care of them. Couldn't drive. Still can't drive." I interviewed her again later to clarify the timeline a bit. She reiterated how computers mattered little to her because "I was in Mommy mode. Being a wife. Being a mother. So a lot of things that you need to do [for yourself] are on the backburner. So everything else comes first." Rania relied on public schools to teach her children reading, writing, and digital literacy. She didn't buy a Dell laptop until 1999 or so for her first daughter when she started college.

Once her children left the proverbial nest, Rania was back on track to learning for herself. She attended a community college to get her degree in visual communication and media back in Sakowin. "I just—what I had at [Sakowin Community College], what we did was, designed it in Adobe. Slide it up. Do it in Dreamweaver. And in Dreamweaver code it. You didn't have to worry about it. And they did the very basics. Nothing, you know, real in-depth. Just the basic HTML and then you learn, you know, CSS and

Dreamweaver." I wanted to inquire about the motive for this learning, if it aligned with other participants' literacy history interviews—learning out of curiosity, to poke around and tinker. Rania flatly said, "No, not really." I was taken aback. Rania "loved to design," going back to her childhood drawing to escape or process her feelings about domestic abuse. The computer was just a tool to get at design. "I need to do this to get here," said Rania. "But I didn't like it—I never loved numbers like that. So I didn't want to—I never had a dream to take the computer apart, see what made it think, all of that. I just wanted to design." Rania had done freelance work since 2008, a year after she graduated from Sakowin Community College, but she had not learned to make websites go live, or learned HMTL, CSS, and JavaScript to make her designs pop. Rania laid down this wisdom to explain what Clearwater Academy meant to her: "Life happens, and you don't get to do the stuff that you love to do. You start living for other people. And that's pretty much what happened, and it was like, I need to do a transition to better myself, to better my life. And so this was just like transition to get back to doing what I really love, and not to be idle and stuff like that." Clearwater Academy would extend her literacy work practices further.

Computer code bootcamps like Clearwater Academy would also give Black women adult learners access to the private digital playgrounds they created as children. Zelda was drawn to marketing while working as a nanny and as a ghost writer for a mother who labored as a sex worker. Thanks in part to her playing with HTML and CSS through Myspace and BlackPlanet and with photo editing in her spare time, Zelda created ads to attract clients. The mother was so impressed by the results she recommended Zelda to other sex workers. Although she would later fall out of this well-paid work ("I became a normal person"), Zelda never stopped paying attention to social media's development. Zelda had rich knowledge on the viewing habits and content creation practices of Generation Z social media influencers, who at the time of our interview in 2017, would be twenty-one and younger. Zelda wanted to make at least 75,000 dollars a year—adjusted for inflation in 2017—leading a social media marketing firm. The firm would target Generation Z because they're the "people with the real buying power. Very soon they'll be the ones with the buying power." Where do they get their information? YouTube. She recalled viewing a Snapchat story about a nineteen-year-old social media influencer.

> So back in the day people used to play with Barbies and dolls. If you ever look at a kid that's seven or eight and they're on YouTube, they're looking at videos of people playing with action figures or dolls or something. They're not doing it

> themselves. They're literally watching people open the boxes and play with them. And they get hella views. But YouTube pays for views. And then depending on how many subscribers you get and views you get, they pay you and then other people endorse you. She's [a social media influencer] only like twenty-one now and I think she probably makes 1500, I mean 15,000 a week. And she's endorsed by Nike?

Zelda was thinking about how to market to future generation of Internet users with real buying power. She not only understood viewing habits from watching her niece and how social media influencers made money; Zelda considered research on Gen Z's philosophical outlook, too. She argued that you must observe that Gen Z "aren't as racist as previous generations, for one. And more open-minded to things and they take different things differently than other people do. They get offended by shit, and they'll let you know." Zelda thought she was best prepared for social media marketing to Gen Z Internet users. Thinking back to those days creating ads for sex workers, Zelda found she was "really good at coming up with catchy things. I like marketing." Clearwater Academy would be a bridge to her desires form for this kind of literacy work practice. The credits could go towards an associate degree and then Zelda would transfer to Penn State; meanwhile, the coveted internship opportunities that could turn into out-of-state job opportunities – all next steps, based on Zelda's desires, for starting a digital marketing firm. As for coding, Zelda thought "it was cool. It's not cool. I just do it." She thought everyone—not just Black people—needed to know something about the building blocks of our digital worlds, especially given that kids are doing it and could "take our jobs" at age 14 if they wanted to. But computer programming wasn't a conclusion for her; the credential and the experience overall would apply to new work ethics for literacy work practices.

Completing training in employability and coding literacy helped solidify Black women participants' identities and social positions. Rosie had admired the IT profession in high school but took "a detour" to help family. As explained above, she had always been a returning adult learner—whether studying IT in a certificate program or volunteering to develop software packages for clerical workers at her job with the state. Rosie, like so many other parents including ones written about here, was both a mother and a teacher to her children. For the most part, she let school teach her children reading and writing and computer use, but she supplemented their learning on the side. Rosie introduced them to Mavis Beacon to learn typing, and she modeled typing for them when she worked on the home computer. "Some kids didn't have that at home," Rosie recalled. "So I was fortunate enough that they had something to see it like that.

If they didn't know something, if I knew about it, I could tell them. Or at least be a resource or ask this person or something like that."

Be a "resource." Rosie often talked about being a "resource" or a "connector" to resources. She had helped her oldest son follow a path toward studying computer science because she knew the right places and the right people for buying computers. "Like this one guy I went to school with," Rosie explained. "He was involved in a program with the Girls and Boys Club, and they showed the kids how to build their own computers. And at the end of that program, you know, you can keep the computer. That sort of sparked their interest in computers and working with the computers." Rosie thought digital literacy was a fun thing for them to learn ("Oh, here's more stuff for my children"), even though she had already imagined working in IT years ago. The importance of computers to everyday life didn't dawn on her until she met friends and family in her own generation who didn't know "about e-mail or how to search for a job on the Internet. How to find information, like Google. Anything you want to know about … You know, 'What is Google?' You know information is just so vast."

While she started as a resource for her children, Rosie suddenly found herself being a resource to others. People in her community came to Rosie asking for help on writing résumés and using computers. That started ten or fifteen years before she signed up for Clearwater Academy. If she was going to be a resource to family and community members, Rosie knew she needed "'a lot of help. Because with the way the world is changing, everything is on the computer now. Everything. Even something as simple as you get an Uber. 'What's Uber? You have to know about computers … on your cellphone to get order an Uber. You just can't call up Uber on the phone?'" Luckily, Rosie had already been a lifelong learner. Younger family members and her children became new teachers, and she used Khan Academy for more information. While she was grateful for the vast number of resources, Rosie spent little time with them—a few hours here and there, and then a long break that stretched for several days or weeks. "I always have a thousand things to do," Rosie said, "and so to fit something else in it or on it is a feat in of itself. If you want to learn something, just fit it in where you can get it." She was diagnosed with lupus in 2016. Her doctor suggested Rosie go into early retirement to take care of her body. Suddenly, Rosie had more time for learning. She had known about Clearwater Academy from a friend. Being out of the economy as a literate subject, Rosie could now take on the computer code bootcamp fulltime.

Rosie imagined continuing to use her newfound literacy work practices into furthering her resource mission. First, she thought of working with small Black-owned businesses. She knew of some mom-and-pop stores that had not switched to e-commerce or had not accepted digital payments; this left

some Black business owners of her generation behind in local competition. Rosie could be a resource to them, teach them how to take their businesses to the next level. She also imagined turning her culminating class project into an actual event: Black Women's Wellness Day, a conference that promoted healthy living among Black women. While she would accept an internship, if possible, Rosie hoped that job opportunities would allow her to travel and work remote, something she had never been able to pursue because of work and taking care of her mother.

Alice also imagined a different relationship with work after finishing Clearwater Academy that would help her reclaim Black motherhood. In a scholarship essay to Clearwater Academy for utility bill assistance, Alice recalled growing up with "an absent father and an overworked abused single mother who never had time for my siblings and I." As an adult, Alice felt "a tad resentful that I was never able to attend any extracurricular activities because my mother was always busy working or simply too tired to go." Alice recognized going down a similar trajectory with her children—minus the abuse—and tried her best to "support my girls in anything they want to do no matter the subject." But going to Clearwater Academy fulltime and studying for the Journey program without unemployment benefits strained Alice's relationship with her daughters.

After finishing Clearwater Academy, then, Alice wanted to go back to school and get a bachelor's in computer science, but for work, she would use coding literacy to combine her long experience in banking and finance with IT. But the job would ultimately help her make up for lost time with her children. She writes, "Ideally, I would like to work from home in a position that would allow me to travel and spend more time with my little girls while they are still little." Devoting herself to motherhood mattered, and a good job would help not be "distracted with creeping thoughts of mounting bills or hunger pains, or one-on-one time where they [her daughters] can tell me everything they haven't had a chance because I have been too busy chasing my own dreams." Alice imagined a work ethic with computers that drew on her history in low-waged work while also giving her the freedom to enjoy Black motherhood in a stable, financial environment. In other words, Alice imagined work not for work's sake, and to satisfy the tech industry's need for innovative culturally response designs and for diverse coders; she imagined learning coding literacy to arrive at a different Black life altogether.

Finally, Halima understood coding literacy, and any career in tech, was an opportunity to reach her full potential. Recall that Halima spent her literacy work history doing boring work; while she was good at her jobs from card services to IT help desk, she had not thought her literacy practices gave much worth to her well-being. She began to ideate a future career in tech

while working in the baby department for a well-known coat retail store. They used Linux for their computer software, and Halima learned it better than anyone else, even the managers. She really began to imagine new possibilities for herself and her family in tech while completing training in IT from a local nonprofit. During class, Halima would learn how to take apart computers and put them back together. The process was fun! Then, working for the university IT department, Halima had to dispose of old computers, and "I was just like 'Dang how are they doing this, and how many companies are doing this? I don't think there are enough companies that dispose of old technology. Maybe I can do it.'" The company would be called Obsolete, and the company would properly recycle or dispose old technology. Her first employees, Halima said during our interview, would be her three children, the ultimate family-bonding activity. She joked and said they would "work for free" while Halima worked to make the service a profitable project.

However, Halima also believed working with computers—whether computer programming or something else—fulfilling to herself; that required a real challenge and a meaningful social environment. Learning coding literacy at Clearwater Academy helped her "feel like I'm living up to my potential using my mind." Doing the drudgery of IT work was so easy she could complete tasks "half asleep with one eyeball open." But computer programming challenged her in a fun and engaging way. Coding was a "refreshing challenge; I'm glad it's hard like this because if it was easy, like 'Why am I doing this?'" Learning computer programming at Clearwater Academy required both eyes open; you "can't fall asleep" on coding literacy. And Halima felt at home learning coding among other like-minded low-income women and BIPOC. With her children and even co-workers in IT, Halima felt like she had to simplify her language. When I asked about what she talked about, Halima wasn't sure—she was just talking to, perhaps "the wrong people." But at Clearwater Academy Halima loved being around people she could relate to. Halima had been searching for a literacy work and literacy work conditions that gave her options to express her Black knowledge among people that affirmed her humanity and knowledge. Working on Linux was a return to the days she spent practicing web design. Clearwater Academy offered opportunities to develop her digital literacy skills in ways not offered through low-waged work in the IT department. Throughout her literacy work history, Halima develops a picture of what she wants to gain with coding literacy being a tool to reach those ends.

Black women adult learners did not erase their histories of low-waged work, as they were formative for developing relationships with literacy work practices and digital literacy practices more generally. They took stock of their literacy repertoire and how they had moved through the world and found computer programming another opportunity to propel them forward. Some

low-waged work remained valuable as a springboard to imagining how obtain different kinds of work in tech aligned with their work and lived experiences. Rather than Clearwater Academy turning them into coders, the six Black women in this study flipped the computer code bootcamp around and started using it as jumping off point into more meaningful and relevant labor. Leveraging computer programming to join a class of knowledge workers would reward them in the long run access to what has been a legacy of denial in the United States since 1619: family, community, and social mobility.

Conclusion: A Black Woman Coder Wanted

Coding movement discourse gives computer programming the mythical power to drive social mobility and a diverse workforce in tech across many positions, but especially in software development. Language about coding literacy and what dictates its use carries ideologies about race, class, and gender. Communities of computer code bootcamp instructors and administrators and their tech company partners carry these biases and create stories about what knowledge adult learners of computer programming should have already, what kinds of labor matter to the industry, and how they should look and be in each technological workplace. These stories construct evaluative worlds of judging others and themselves (Gee, 2011). That gas station attendants should not be in tech, as one tech sponsor said to Richard, suggests some people attending computer code bootcamps don't know how to appropriately interact with coding professionals, or fit in their figured world, and their literacy work history somehow confirms that evaluation. Such discourse veils itself in intersectional oppression, which animates curriculum design in Clearwater Academy. Institutional racism, sexism, and poverty led Black women adult learners to rely on low-waged work as a safety net. In these positions, their work has value to their employers and the institutional systems they support (finance, healthcare, retail, etc.), but under some literacy work conditions Black women participants found disrespect and their literacy work practices limited or confined to gendered labor. This work can be equally devalued in coding: their literacy work histories are unrecognizable evidence that they have the potential to behave according to the work ethics of computer programming, as local employers practice them. Black women's literacy work practice can't be trusted, and they need new training. A clean slate. For a career as a software programmer, they require a restart to the norms of tech workplaces in addition to fundamental attitudes associated with computer programming (learning how to learn); and that training raises their worth as human capital to the tech industry. Constructing labor for Black women in this way already places them on shaky ground with computer

code bootcamps, as they can already be seen as failures on the verge of failing again because they have already failed before.

Black women's literacy work histories in this chapter describe one area of Black coding discourse that retell these stories and recreate their figured worlds, or Black tech ecosystems. What these Black women participants lacked in opportunity and privilege, they made up for with Black feminist knowledge on how to leverage literacy work practices into combating poverty and preserving themselves and their families. While these Black women never identified as feminists themselves, their stories reflect a Black feminist principle that experience with and knowledge of oppression informs unique Black feminist knowledge that helps the community enact a pragmatic, realistic future (Collins, 2009). Their experiences with digital literacies in the context of work and oppression informs their developing a new Black tech ecosystem that consists of desired digital literacy work practices (digital marketing, a community resource to Black business owners, etc.) and the kind of relationship with, or work ethic, that guide the motivation for their labor (reconnection with Black motherhood, flexible work, a resource to others, a contributor to Internet culture). With Clearwater Academy as a bridge, they, to borrow Alice's words, can journey toward lives they didn't think possible.