

(SS)

Why Teach About Black Inventors? A Review of Rayvon Fouché's "Black Inventors in the Age of Segregation"

Journal of Social Studies Research I-4 © The Author(s) 2024 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/23522798241230336 journals.sagepub.com/home/ssr



Fouché, R. (2003). Black Inventors in the Age of Segregation: Granville T. Woods, Lewis H. Latimer, and Shelby J. Davidson. Baltimore, MD: John Hopkins University Press. 225 pp., \$30.00 paperback, ISBN-13 9780801882708.

In the final chapter of his 2003 book, Rayvon Fouché tells the story of a Black teacher at a primarily white elementary school who asked him to speak to her class about Black inventors. In doing so, Fouché wrestled with a question that I asked myself as I read his book, why teach about Black inventors? He suspected the teacher wanted him to show students the contributions Black inventors made to society, and this was confirmed when he saw her "African American invention display" case that named Black inventors, their inventions, and their patent numbers (p. 179). This was not the talk Fouché planned to give.

It is the 20th anniversary of Fouché's *Black Inventors* in the Age of Segregation: Granville T. Woods, Lewis H. Latimer, and Shelby J. Davidson, but the book remains relevant to the social studies field. Dr. Fouché contended that Black inventors are often "elevated to race champions" alongside "leaders like Martin Luther King, Jr., Malcolm X, and Rose Parks," particularly during Black History Month (p. 182). Originally, these Black inventor lists served the practical purpose of combating an outwardly anti-Black racism that purported that Black Americans lacked inventive and technical expertise and creativity. Black invetor counterstories thus placed Black inventors within a larger story of technological progress that created the modern technological world. The stories often were provided as evidence of the American dream. However, this narrative is grounded in racist assumptions and it can also be historically inaccurate.

Fouché offered detailed chapters featuring three inventors who lived at the turn of the 20th century. These stories are far more complex than those often included in school materials. Granville T. Woods was a mechanical and electrical engineer from Australia and then Ohio who is most well known for inventing an induction telegraph that used telegraph lines to send messages between train stations and moving train cars. Lewis H. Latimer was a patent draftsman from Massachusetts who helped Alexander Graham Bell secure the patent for the telephone, and an inventor who

patented improvements to the incandescent lightbulb. Shelby J. Davidson was an inventor from Kentucky who made improvements to adding machines to improve the U.S. Treasury Department's calculating processes and increase productivity. Teaching *through* the stories of these three Black inventors can help disrupt the Black inventor myth.

The Black Inventor Myth

Fouché's Black inventor myth includes four tenets.

Black Inventors Had Financial Success Because They Secured Patents

None of the three Black inventors gained significant wealth from their inventions. Woods, despite being known as the Black Edison, died anonymous and in poverty. Both Davidson and Latimer enjoyed middle class lives, but that was not due to their inventions. Moreover, many of their patented inventions were quickly obsolete, which was not at all uncommon. Granville Woods' story illustrates this tenet particularly well as Fouché detailed the systemic challenges he faced in securing funding for patent applications, infringement cases, and product development. Turning patents into profits was difficult for any inventors of the day, but Black inventors faced additional challenges.

Black Inventors Invented to Contribute to Racial Uplif

None of the three inventors created primarily for Black racial uplift. Due to being born in Australia, Woods did not identify himself as a Black American. Latimer's social interactions were limited to fellow Black elites. This is most evident in Fouché's analysis of two 1904 letters Latimer sent to Booker T. Washington that advanced an ideology of racial assimilation into whiteness. Davidson had more contact with the Black community, but he did so with caution. All three men could have lost access and opportunities if they had been vocal advocates for Black equality as their work associates were primarily white men. Thus, it may not be completely surprising that "their identification was

linked most strongly to individual accolades, personal social climbing, and financial aspirations" (p. 183).

Black Inventors Were the Only Ones Who Could Have Invented Their Object, Device, or Process

Many of the inventions created by Black inventors would likely have been invented by others pursuing similar ideas if they had not done so. For example, Shelby Davidson invented devices to improve adding machines, but adding machines already existed. Lewis Latimer patented improvements to electric light bulbs, but many other inventors secured patents with similar and related aims. This is not meant to diminish the inventions of Black men, but to place them into the context of a larger community of inventors. It also acknowledges that there is a difference between inventing new devices or processes, securing patents, and turning patents into profitable products.

In an effort to recognize Black inventors, there has been a tendency to inflate the effects of their inventions. For example, President Joe Biden claimed in 2020 that a Black man (implying Latimer) had invented the light bulb, not "a White guy named Edison" (Asmelash, 2020, n.p.). It is correct for students to reject the sole inventor myth that "Edison invented the lightbulb" (Lemley, 2011). Students should understand that inventions are often pursued by many people simultaneously. Edison did not solely invent the lightbulb, but he did identify a longer lasting carbon filament that made lightbulbs more commercially viable. Latimer patented an invention after Edison that also contributed to carbon filaments lasting longer. This benefited Hiram Maxim in his competition against Edison's bulbs. While Edison's ruthless pursuit of patents and profits is worthy of critique, Latimer was later part of the legal team that fought patent infringement cases in court for Edison.

Black Inventors All Experienced and Reacted to Racism Similarly

Anti-Black racism affected Black inventors' lives in different ways. In the case of Lewis Latimer, racism had less visible professional effects than his peers. For example, he managed to gain acceptance into the larger electric light industry—working first for Hiram Maxim at United States Electric Company and later for his rival Thomas Edison at General Electric. Moreover, Latimer considered his induction to the Edison Pioneers, a social club for those who worked with Edison prior to 1886, part of his legacy. This does not mean Latimer did not face anti-Black racism. He did, particularly during his time setting up an electric light factory in London, and likely endured racism in many other instances of which we will never know. On the other hand, Shelby Davidson's successful inventive career in

federal government was completeley derided as anti-Black racism, segregation, and demotions increased for Black workers during the Taft administration. Both Latimer and Davidson internalized assimilationist ideologies whereby Black Americans had to prove they were "civilized" to the dominant white culture. Davidson shifted his views once he was driven from the Treasury Department.

Importance to the Social Studies Field

I hope to bring this book back into the consciousness of social studies educators because it aligns with, and deepens, important contributions to the field around understandings of race, technology, and heroification. Fouché's work recommends that social studies educators should stop using Black inventors as props for cultural consumptions where "inventions, not inventors, mattered" (p. 180). Instead social studies educators must teach their complexity. He argued for "a new type of black inventive hero—a hero with human qualities" (p. 5).

Fouché's rejection of heroic myths aligns well with a rejection of heroification taken up in the field (Loewen, 1995). This can also extend to avoiding villainification in the stories of Black inventors. It is easy, for example, to place all blame on well known white inventors like Thomas Edison instead of considering how everyday people participated in systems of oppression (van Kessel & Crowley, 2017). Fouché rejected heroification and villainification when he argued that we "should not valorize or condemn" Black inventors (p. 4).

As Woodson's (2016) research showed regarding civic action, making Black inventors into heroes may counterintuitively constrain the civic agency of Black youth around invention. Students have much to learn from the complex historical struggles of Black inventors in white-dominated technological industries because these struggles persist into the present. Students might consider, for example, how Timnit Gebru's firing from Google for attending to racial justice in her work contrasts with Black men who largely avoided the topic in their work at the turn of the 20th century (Hao, 2020).

Second, this book aligns well with King's (2020) Black historical consciousness principles. King contended that social studies educators must recognize *Black historical contention* to show that Black historical actors are neither "a monolithic group" nor "perfect messiahs" (p. 380). Fouché regularly echoed King's argument that social studies educators should "introduce a complete history that addresses humanity that includes Black people's deficiencies and vulnerabilities" (p. 380). Jones (2024) further contended that educators should focus on ideological differences, not adversiarial relationships; recognize that oppressive systems are not exclusive to Black people, thus a need

Book Review 3

for intersectional analysis; and emphasize Black humanity through their feelings. Educators today should emphathize with the unenviable position that Black men inventors faced trying to succeed in a white supremacist society. They had to navigate a society that did not offer them good options.

It is in this context that educators might approach Fouché's chapters which illustrate how many Black inventors expressed assimilationist views that separated themselves from the larger Black struggle for equality. Such beliefs align with popular ideas among Black elites such as Booker T. Washington or even W.E.B. DuBois with his Talented Tenth theory. In Stamped from the Beginning, Kendi (2017) offered three frames for interpreting views on race. Through historical analysis, Kendi posited that people can act as (a) racist segregationists who believe Black people are inferior and deserve segregation, (b) racist assimilationists who believe Black people can gain equality by being more "civilized" like white people, or (c) antiracists who accept Black people as inherently equal on their own cultural terms. Students can develop their racial consciousness by understanding that, to the degree that white people accepted Black inventors, it was often based on their assimilation into whiteness. Some Black elites like Latimer reproduced those racist beliefs instead of confronting systems of oppression head on, but educators are wise to emphasize understanding of the historical context and avoid presentist judgment.

Fouché's stories of each Black inventor confront many of King's (2020) other principles such as *Power and Oppression; Black Agency, Resistance, and Perseverance*; and *Black Joy*. Social studies educators could also work to emphasize principles such as *Africa and the African Diaspora* and *Black identities* that are less represented in the book.

Finally, this book can help social studies educators teach about technology in more contextual and critical ways. Students live in a highly technological world and state standards provide teachers little guidance in helping craft thoughtful lessons about technology (Krutka et al., 2022). Fouché contended that:

Many historians have ignored technology as an institutionalized force that marginalizes black people within American society and culture. Many scholars have overlooked technology because of the perception that it is just "stuff" and therefore value-neutral, non-gendered, and nonracist. This perception allows the unproblematic acceptance of technology as a simple black box, which, in turn, supports the assumption that technology can be fully understood by its most simple materials form and function. (p. 2)

This aligns with recent arguments that students need to develop *technoskeptical* knowledge, skills, and dispositions (Krutka et al., 2022; Pleasants et al., 2023). Social

studies has too often conceded deterministic curricula (often from the STEM fields) that equates technological advancement and social progress, and also treats "innovation" as an inherent good. Instead, social studies educators need to problematize technologies of the past and present. Students should understand that technological inventions do not always make the world better. Technologies always carry trade-offs (Postman, 1992). This understanding can help students see themselves as agents in creating democratic and just technological worlds.

Continuing the Struggle in the Classroom

When Fouché visited the elementary school he did not disrupt the Black inventor myth as he had planned. When he looked out at a gym full of primarily white children and teachers (yes, his class visit unexpectedly turned into an all-school assembly), he "felt uneasy about exposing some of the contradictions in the lives of black inventors unless there was someone to besides the lone black teacher to do the clean-up" (p. 181). He was concerned that Black historical figures were likely taught about so little that it "seemed disrespectful to perform criticism during the one month of the year when black cultural heroes and icons are publicly celebrated," and he did not want his criticism to be "misinterpreted as a devaluation of their inventive work" (p. 181).

As I read Fouché's book I felt uneasy as a White educator who would trouble the lives of Black inventors. I worried that students may know little about Black histories and Black inventors. What if my critiques grafted to white supremacist narratives about Black inferiority in the minds of students? The answer, of course, is that I must teach Black histories across the curriculum and year, not limit it to February. We must, as James (2023) implored, teach "Black history any day, every day, and all year long." When social studies educators teach *through*, not *about*, the complex lives of Black inventors, students start to understand them as people, not patents (King, 2020).

Daniel G. Krutka

University of North Texas, Denton, TX, USA

dankrutka@gmail.com

ORCID iD

Daniel G. Krutka (D) https://orcid.org/0000-0003-1261-4838

References

Asmelash, L. (2020, September 4). No, a Black man didn't invent the light bulb. But Lewis Howard Latimer made it better. *CNN*. https://www.cnn.com/2020/09/04/us/biden-lightbulb-black-man-trnd/index.html

- Hao, K. (2020, December 4). We read the paper that forced Timnit Gebru out of Google. Here's what it says. MIT Technology Review. https://www.technologyreview.com/2020/12/04/101 3294/google-ai-ethics-research-paper-forced-out-timnit-gebru/
- James, D. (2023). Beyond February: Teaching Black history any day, every day, and all year long. Routledge.
- Jones, B. (2024, January 30). You should be teaching Black Historical Contention. EdWeek. https://www.edweek.org/ leadership/opinion-you-should-be-teaching-black-historicalcontention/2024/01
- Kendi, I. X. (2017). Stamped from the beginning: The definitive history of racist ideas in America. Bold Type Books.
- King, L. J. (2020). Black history is not American history: Toward a framework of Black historical consciousness. *Social Education*, 84(6), 335–341.
- Krutka, D. G., Metzger, S. A., & Seitz, R. Z. (2022). "Technology inevitably involves trade-offs": The framing of technology

- in social studies standards. Theory & Research in Social Education, 50(2), 226–254.
- Lemley, M. A. (2011). The myth of the sole inventor. *Michigan Law Review*, 110, 709–760.
- Loewen, J. W. (1995). Lies my teacher told me: Everything your American history textbook got wrong. Touchstone.
- Postman, N. (1992). Technopoly: The surrender of culture to technology. Vintage.
- Pleasants, J., Krutka, D. G., & Nichols, T. P. (2023). What relationships do we want with technology? Toward technoskepticism in schools. *Harvard Educational Review*, *93*(4), 486–515.
- van Kessel, C., & Crowley, R. M. (2017). Villainification and evil in social studies education. *Theory & Research in Social Education*, 45(4), 427–455.
- Woodson, A. N. (2016). We're just ordinary people: Messianic master narratives and Black youths' civic agency. *Theory & Research in Social Education*, 44(2), 184–211.