

## Chapter 21

# Objects of Protection, Enduring Nodes of Difference: Disability Intersections With “Other” Differences, 1916 to 2016

ALFREDO J. ARTILES  
SHERMAN DORN  
*Arizona State University*

AYDIN BAL  
*University of Wisconsin, Madison*

*The purpose of this chapter is to contribute a cultural–historical analytical perspective on disability and its intersections. We assume that disability is socially, historically, and spatially constructed. This standpoint enables us to understand and disrupt disparities in education that affect students living at the intersection of disability with race and other identity markers. We trace the evolution of disability as an object of protection and injustice from before 1916 to 2016. The chapter is divided into three sections: disability constructions and intersections before 1960, consolidation of the intersections of difference with disabilities between 1960 and 1990, and the protean nature of disability intersections and fragmentations in contemporary history between 1990 and the present. We review legal, social, and academic discourses and offer interdisciplinary conceptual tools to understand the technical and sociopolitical anatomies of disabilities. We end with a brief discussion of future interdisciplinary research programs, including attention to a biocultural dimension in the study of this complex phenomenon.*

The idea of disability has arguably evolved over time from a category of oppression and exclusion to an identity that affords entitlements, programs, and benefits. Indeed, the passage of comprehensive policies such as the Individuals With Disabilities Education Improvement Act (20 U.S.C. §1400 *et seq.* [2004],

reauthorization of the Individuals With Disabilities Education Act of 1990), the Elementary and Secondary Education Act (Pub. L. No. 89-10, 79 Stat. 27 [1965]), and the Americans With Disabilities Act (Pub. L. No. 101-336, 104 Stat. 328 [1990]) have countered discrimination and exclusion while they advance the rights and entitlements of people with disabilities. In this sense, disability has been construed as an *object of protection*,<sup>1</sup> since policies bestow rights that give access to diagnoses, which afford the recognition of needs that precedes access to services and other benefits. At the same time, disability continues to play a central role in the stratification of U.S. society. Historian Douglas Baynton (2001) documented how “disability has functioned historically to justify inequality for disabled people themselves” (p. 33). Eugenics, denial of rights, and segregation were present in the early history of people with disabilities in the United States. More recently, indicators of educational inequality for students with disabilities are reflected in the stigma of these labels, the lower educational opportunities and outcomes of this population compared with their counterparts, and their poor postschool outcomes (Green, Davis, Karshmer, Marsh, & Straight, 2005; Skiba et al., 2008; U.S. Department of Education, 2015). Disability has stigmatizing consequences and deleterious effects in the lives of individuals due to dominant social, political, and institutional arrangements regarding access and participation in the United States (Green et al., 2005). We suggest, therefore, that disability has a dual nature, as a condition that veers people into life trajectories fraught with adversities and discrimination, while it is also an object of protection that recruits state’s and communities’ resources (e.g., educational and health programs and benefits) to compensate for the impact of impairments and to develop individuals’ potential for meaningful participation in society.

The dual nature of disability as an object of protection and a conduit for exclusion and disadvantage appears impervious as we consider its long-standing intersections with racial, language, class, and gender differences, among others. The historical record shows that “not only has it been considered justifiable to treat disabled people unequally, but the concept of disability has been used to justify discrimination against other groups by attributing disability to them” (Baynton, 2001, p. 33). Indeed, when we consider such intersections, classification regimes can compound educational inequities—for example, a special education diagnosis is associated with reduced language supports for English language learners (Zehler et al., 2003). Some disability intersections are associated with biological and medical threats—for example, poverty is correlated with a higher prevalence of health problems that may result in disability. Structural factors mediate these associations—for example, residential racial segregation, which is linked to low economic investments in those communities and lower quality educational opportunities. In other instances, disability intersections have created enduring, systemic crises such as racial disparities in special education. These instances are expressions of the dual nature of disability and the special education paradox (Artiles, 2003). More specifically, this is the case of an educational equity resource created for a marginalized group (i.e., learners with disabilities) that can become a source of inequities for another nondominant group (e.g.,

racial minorities; Artiles, 2011). For instance, racial minorities are placed in more segregated programs and receive fewer related services and academic opportunities than their White peers *with the same disability diagnosis* (Skiba et al., 2008).

The protective affordances and the perpetuation of injustices stemming from the dual nature of disability pose complex challenges for researchers. How can such injustices be disrupted while civil rights agendas for people with disabilities and other minorities are advanced? How do we explain that even though the entanglements among these vectors of difference date back hundreds of years, the empirical research on disability intersections is relatively young? What robust conceptual resources can be used to theorize the interdependent roles of biology, culture, and power in explanations of disability intersections that afford educational opportunities as well as deepen educational inequalities? We conclude that the dual nature of disability, particularly in the contexts of its intersections with other markers of difference, has been undertheorized and underexamined in the education field. The cultural–historical<sup>2</sup> examination of the construction of disability seeks the possibilities of justice-oriented organizational restructuring and coalition-building activities that promise to transform marginalization mechanisms in educational systems.

This state of affairs calls for an ontological turn and epistemological analyses in future examinations of this complex problem. An ontological turn enables scholars to understand the complex contingencies under which the notion of disability is interpreted and used across spaces; the emphasis is in the study of the nature of disability and its material enactments in particular places with an eye on the patterning of such performances at larger scales. Borrowing from the field of social studies of science,

Probing the ontology of mundane entities [e.g., disability] not only serves to display the multiplicity of realities hidden under everyday and seemingly undisputed signifiers—it is also . . . a method of drawing attention to the failed, unseen, or not-yet-real possibilities hinted at by ordering practices. (Woolgar & Lezaun, 2013, p. 323)

This analytical perspective must be positioned on an interdisciplinary canvas. Specifically, we argue that disability must be examined through historical and intersectional lenses and documented as a boundary object that traverses locales with the plasticity and fluidity to allow for shifting meanings while enabling coordination across institutional practices.<sup>3</sup> In turn, attention to the epistemological dimension of the construction of disability and its intersections with markers of difference sheds light on the assumptions deployed to create knowledge about this construct, how it is represented, what is made visible and invisible, and the consequences—prominent in this line of analysis is the identification of boundaries that demarcate what counts as legitimate knowledge (i.e., boundary work; Artiles et al., 2011).

The purpose of this chapter, therefore, is to engage these questions and issues through a transformative interdisciplinary analytical perspective that helps describe and explain the entanglements of disability with other identity markers across social–historical–spatial contexts. This perspective promises to capture the dual nature of

disability—the mechanisms of discrimination as well as protective features, including changes and inconsistencies in the modern definition of disability rights. This line of analysis ought to be situated, for “objects are brought into being, they are *realized* in the course of a certain practical activity, and when that happens, they crystallize, provisionally, a particular reality, they invoke the temporary action of a set of circumstances” (Woolgar & Lezaun, 2013, pp. 323–324). More important, our goal is that this analysis will provide tools and illustrate the challenges and possibilities for transforming disability research and special education. In the end, our analytical framework has implications for the theoretical refinement of educational equity, particularly as it relates to injustices that arise from equity efforts.

### **An Overview of the Argument and Its Assumptions**

Our analysis follows a chronological order from before 1916 to the present, and it is framed from an interdisciplinary standpoint that covers ontological (i.e., cultural mediation, social–historical–spatial and intersectional lenses, and disability as a boundary object) and epistemological considerations about disability. We outline these theoretical threads in this section. We did not craft the chapter in a traditional literature review genre in which systematic searches are conducted covering a time period with specific criteria to select and code research studies. Rather, we drew from our extensive expertise and experience conducting research and synthesizing the empirical literature on the topic of disability intersections and its histories in education (e.g., Artiles, 2003; Artiles, Kozleski, Dorn, & Christensen, 2006; Artiles, Kozleski, Trent, Osher, & Ortiz, 2010; Artiles & Trent, 1994; Artiles, Trent, & Palmer, 2004; Bal & Trainor, 2016; Christensen & Dorn, 1997; Dorn, 2002; Waitoller, Artiles, & Cheney, 2010).

We base our analysis on key theoretical and empirical research sources on the topic and selectively illustrate arguments by citing studies where relevant. The so-called high-incidence disability categories are emphasized throughout the chapter, with particular attention to specific learning disabilities (SLD), intellectual disabilities (ID),<sup>4</sup> and emotional disturbance (ED). These categories not only comprise about half of students with disabilities in the United States (U.S. Department of Education, 2015), but they have also been at the epicenter of debates about the intersections of disability, race, class, gender, and language and the historical evolution of disability in the United States (Artiles & Klingner, 2006).

#### *On the Nature of Disability: Continuities and Variations Then and Now*

*Historico-spatial considerations.* A historical perspective is necessary to understand the changing, seemingly symbiotic intertwining of disability with race and other difference markers and to identify the effects of policies and practices on educational equity for students inhabiting double-bind identities (Artiles, 2011). Space is overlaid in this line of analysis. Attention to space sheds light on the regulation of social and public spaces for people with disabilities, including those from racial-minority

backgrounds, in the late 1800s and in the contemporary landscapes of the education field and society (Artiles, 2003; Schweik, 2009). This legacy of state efforts to “cleanse” public space became engraved in bureaucratic behavior. In addition, researchers have documented the spatial distribution of inequities over time that traverse multiple arenas (e.g., public health, education, housing, labor, and health services) and that shape opportunity and social mobility (Artiles et al., 2011; Sampson & Winter, 2016; Tate, 2008). This focus on the structural weight and social uses of space enables researchers to examine technical, social, and ideological dimensions of the intersections of disability with other markers of difference.

The study of disability and its intersections is examined in the present as mediated by the past, which in turn shapes future visions of this idea; thus, a historical understanding of this phenomenon must account for the interdependencies of time scales. Similarly, the notion of disability is shaped by the spaces in which it is examined—local, regional, national, or international levels. This allows us to understand how policies travel across time and space to shape professional and research practices. Moreover, our approach calls for a double analytic focus that examines the connection between local practices and larger sociohistorical processes, which in turn requires a simultaneous focus on multiple time scales, from moment-to-moment histories of human interactions to life histories and histories of groups, communities, populations, and nations. Insights from cultural psychology and critical policy studies inform our work (Artiles, 2003; Cole, 1996; Shore, Wright, & Però, 2011; Ureta, 2014).

*Disability as a boundary object.* Consistent with our ontological emphasis on the enactment of concepts and ideas in practice, we broaden the analytic focus to account for the sociocultural nature of disability categories and how they are taken up across contexts—what Star and Griesemer (1989) termed “boundary objects.”<sup>5</sup> The notion of disability as a boundary object enables us to understand the dual nature of disability as an object of protection and oppression. This means that as a boundary object, disability can shift meanings and uses across settings and communities due in part to local contingencies and group interests. The connections between boundary objects and infrastructures of information and standardization are relevant to this discussion—for example, federal disability definitions are operationalized in states and school districts with various criteria and assessment and identification tools. This helps explain how standard definitions and identification procedures of conditions such as disability produce different prevalence patterns across locales and regions, and disparate (racial, linguistic) groups have different identification risks.

*Intersectional perspective of disability.* An intersectional lens enables us to understand the complexities of students’ social locations and lived experiences in historically stratified communities and institutions. An intersectional analytical perspective illuminates the symbolic and material purposes of social markers (e.g., race, disability) and the consequences (e.g., academic and social opportunities and outcomes) that arise at the intersections of such identities. Thus, intersectionality affords cru-

cial insights about the racialization of disability, compelling us to focus both on the power of assigning categories to individuals and on the authority of those categories “to have social and material consequences” (Crenshaw, 1991, p. 1297). Critical race theory and disability studies literatures inform this perspective.

The role of power plays a central role in the analysis of intersectionality: “Power has clustered around certain [identity] categories and is exercised against others” (Crenshaw, 1991, p. 1297). Therefore, we situate the concept of disability in social, historical, and spatial contexts of power relationships to make visible its long-standing associations with race and other stratifying categories. The hierarchical functions of these intersections have afforded gains to some groups (e.g., access to services) and perpetuated injustices for others (e.g., segregation, denial of rights). The work on White innocence applied to legal decisions and educational reforms illustrates this point, although power can also be examined in practices situated in institutional contexts (i.e., implicit or official regulations, procedures, and practices; Artiles, 2011). Scholarship from critical race theory, critical legal studies, history, and disability studies informs our perspective.

### **Knowledge Production About Disability: Epistemological Considerations**

Empirical findings in a knowledge base are grounded in professional visions (Goodwin, 1994) that entail (often implicit) theoretical framings, logics of action, and methodological approaches situated in unique social, historical, and spatial contexts. Attention to this epistemological dimension enables scholarly communities to infuse a reflexivity that can guide future research programs. An interdisciplinary analysis of the dual nature of disability requires a close attention to the epistemological roots of this knowledge base. That is, it requires a sociological critique of the disciplines that contribute to this literature. Our analysis sheds light on contradictory narratives of progress, as well as critiques of the disciplinary practices that benefit certain groups and particular visions of equity over others. We use the notion of *boundary work* to explain how research communities make categories such as race visible and/or invisible in studies of disabilities (Artiles et al., 2011). Boundary work refers to

the demarcation practices used to maintain a field’s identity. Scientific fields invest efforts to demarcate their boundaries through particular practices. For example, funding agencies in medicine create standards so that only individuals with certain kinds of training and credentials have access to financial support; journal editors develop publication criteria for manuscripts to meet agreed-upon requirements and align with the conventions of scholarly reports. Demarcation does not only constitute an analytical problem; there are indeed material and symbolic consequences for the enforcers of boundary work that affirm and enhance their own intellectual authority, afford them professional opportunities, and ensure autonomy to the field. (Artiles et al., 2011, p. 168)

We apply the notion of boundary work to analyze whether and how culture and its historical proxies—race, ethnicity, class, and language differences—have been taken up in the knowledge base about disability. We inform this critique with sociology of science and political philosophy scholarship (Gieryn, 1983, 1995; Latour, 1999; Mills, 1997).

The preceding theoretical threads inform our interdisciplinary analysis. We describe and explain disability intersections with other identity markers across cultural and historical contexts, with particular attention to the paradoxical nature of disability. We organize the chapter following a chronological sequence covering the early period before 1960 and then the periods 1960 to 1990 and 1990 to 2016. We conclude with notes for future research programs.

## **DISABILITY CONSTRUCTIONS AND INTERSECTIONS BEFORE 1960**

The origin of modern intersectionality is partly rooted in the development of the intellectual landscape before 1960, from the expansion of state authority over disability to the development of disability as an object of protection and moral judgment. This earlier history set the stage for civil rights legislation around disability, but that earlier history also contributed to the limits of protective concepts around disability. The early historical construction of disability as an object defined the possible—what was in the universe of definitions for disability and human capacity. That implicit definition was narrow, a limited and constricted ontology. Decades later, disability rights activists actively attempted to dismantle that narrow ontology and institutional definitions of human capacity. Gould's (1996) famous argument about scientific racism and the roles of IQ testing in institutionalization and local public school districts has contributed significantly to our understanding of scientific racism and the ways that bureaucracies such as school systems contain and privilege biases of the day. Yet that focus is insufficient to explain three features of the history of disability as a concept and its intersectionality: the long shadow of Progressive-era disability constructs, the fact that intersectionality became more complicated and paradoxical after post–World War II civil rights struggles over race and disability, and the persistent capacity of schools to convert idealistic initiatives into bureaucratic objects bound to conventional notions of disability. This historical and institutional ontology of disability remains today alongside other definitions of human capacity. To address the persistence of bureaucratic objectification of disability, one first needs to understand the foundation for the (re)generation of disability as a construct in the Progressive era, the early infrastructure of social science expertise, and how that infrastructure privileged and supported a particular set of disability concepts.

### **The Intellectual History of Disability Is Centuries Old**

The intellectual history of disability in the United States is older and more complicated than late 19th-century scientific racism. In stating this, we disagree with the standard history of special education as often portrayed in education, which focuses on the prejudicial attitudes in the late 19th century as the origin of modern disability constructs. It is correct that major actors in the Progressive era often acted on their prejudices (e.g., Franklin, 1994; Gould, 1996). Yet the last few decades of disability studies research have highlighted two important features of the history of disability

discourse that have generally been ignored in education: One feature is the older roots of disability discourse, including the racialization of disability discourse. As Baynton (2001) wrote, "Disability has functioned historically to justify inequality for disabled people themselves, but it has also done so for women and minority groups" (p. 33). The second feature is the relationship between constructs of disability and the types of institutional structures discussed later in this section: law, the military, and municipal regulations of behavior.

Racial supremacist thought in the United States has a centuries-long pedigree (e.g., Jordan, 1968), which includes a number of racial myths regarding Africans and their descendants, especially their physical features and inherited moral qualities used to justify slavery. One does not need to resolve various debates over the intellectual history of racism to understand how it intertwined with an evolving discourse of disease and disfigurement. Menchaca (1997) has seen a long strain of racially oriented deficit thinking in British North American colonies and the United States. Not all researchers agree with a long view that emphasizes continuity; Baynton (2001) has located modern definitions of disability in the second half of the 19th century and the ideology of Social Darwinism. Yet Baynton acknowledged that many justifications of American slavery in the first half of the century relied on pseudoscientific claims about the medical fragility of slaves, a feature echoed by other historians (e.g., Barclay, 2011, 2014; Boster, 2015). The late 19th- and early 20th-century intersection of disability discourse and immigration debates in the Progressive era thus built on a much longer history of racism intertwined with medical and other ableist discourses (e.g., Baker, 2002; Baynton, 2005; Molina, 2006).

What was qualitatively different after the Civil War was the growing relationship between institutional authority and ideology, a connection among the uses of disability as a bureaucratic tool of social engineering, the objectification of disability as a concept, and the objectification of individuals labeled as disabled. The growth of private and public bureaucracies at the end of the 19th century encouraged and enabled public officials to experiment in managing armies, veterans, widows benefits, schools, and public health departments (e.g., Graebner, 1977, 1980; Skocpol, 1992; Skowronek, 1982). These experiments paralleled the ways in which businesses had to innovate in the late 19th century in controlling their own affairs (Chandler, 1977; Dorn & Johannigmeier, 1999). The racialization of private and public bureaucracy accompanied their growth and left its mark on the organizations. After the Civil War, disability often became a badge of honor for war veterans, but both the honor and concrete government benefits for war veterans were highly racialized (Logue & Blanck, 2010). Veterans with missing limbs were visible signs of the war, but municipal governments began constructing laws against public display of disability and disfigurement in the late 19th century, trying to cleanse public space of visible "ugliness" (Schweik, 2009). This attempt to cleanse cities of disability came in the same era when city and state governments created racial segregation laws in an attempt to cleanse public spaces of visible interracial interactions (Cell, 1982).<sup>6</sup> Public space became a target of social intervention along intersectional lines. As a gathering place



for children and adults, schools were one site of such intervention. In this context of growing bureaucracies, schools served as both a moral agent inherited from earlier decades and the agent of the state, and new constructions of disability found a ready ground for being operationalized as bureaucratic behavior.

In this way across multiple growing organizations, administrative authority became a platform for scientific racism; a critical underpinning of the new discourse of disability was the set of institutional and social networks in support of the new professionals of disability (J. W. Trent, 1994).<sup>7</sup> The construction of recognized knowledge about disability has developed in specific places and networks; the epistemology of disability is inseparable from the social history of administrative authority. In the early 20th century, the premier theorist (and fabulist) of racial and ethnic intellectual differences was the director of research at a residential school for individuals labeled as feeble-minded: Henry Goddard of the Vineland Training School. He was not an isolated crank; he was among the first generation of doctoral psychologists in the United States, a student of G. Stanley Hall at Clark University in the 1890s, and enmeshed in a professional network of eugenicists and leaders at residential institutions. The feedback among institutional growth, tools to “manage” a population, and the emergence of disciplinary expertise to study the object of those tools is not an accident: that three-sided relationship was a feature of the era in which special education developed.

### **Public Authority Over Education, Industrialization, Immigration, and Inequality in the Progressive Era**

Progressive-era constructions of disability in education also had their roots in several major changes in American life after the Civil War. First, the Civil War saw the nationalization of the discourse around education as both an object of state power and a right of citizenship. During the war, Congress passed the first land-grant university bill to promote public universities as a resource for economic growth (Veysey, 1965). After the war, the Freedmen’s Bureau directly supported hundreds of primary schools across the South, and Reconstruction-era state constitutions in former Confederate states generally guaranteed primary education as a fundamental state obligation, in ways parallel to Northern states from before the war (e.g., Du Bois, 1935). It was also after the Civil War when the passage of compulsory education laws accelerated and states became successful in defending compulsory school laws in state courts (Provasnik, 2006).

While the American discourse around education and state power became nationalized, it was subject to other social and political developments. As post-Civil War industrialization became more mechanized, industrial employment was a significant factor in drawing a new wave of immigration from southern and eastern Europe, a surge that crested between 1890 and 1920 (e.g., Morawska, 2003). In the same decades, the opening of political and social life for African American Southerners during Reconstruction ended brutally with both the suppression of voting rights and

the development of segregation in schools, mass transportation, and other parts of public life. As noted earlier, it was also in the same era that public spaces began to be regulated to “cleanse” cities of undesirable sights by elites, whether integrated trolleys in Atlanta or “maimed” or “disfigured” beggars in San Francisco, Chicago, New Orleans, and other cities (Schweik, 2009). Post–Civil War developments ensured that schools across the country maintained or newly acquired a role as moral and economic agents, while the obligations of schools became different by social class, national origin, and race. Schools in many places became responsible for socializing immigrants and limiting the ambitions of African Americans, as well as identifying and excluding children identified as disabled (J. D. Anderson, 1988; Olneck, 1989). These distinctions set the stage for the development of specialization and the incorporation of disability constructs into bureaucratic school routines.

### **Social Science and Administrative Authority**

The desire to assuage the moral panic and other social anxieties around disability in the 19th century was not unique to schools or disability and was intimately connected with the management of public space. One can put the social management of disability in a broader set of social engineering projects in the Progressive era. From the “scientific” organization of charity to public health infrastructures, municipal governments and public agencies sought to expand their capacity to respond to a growing demand for urban development and management. This social management was tied to both the mechanization of industry and the rapid growth of cities and their public spaces. Progressive-era advocates of public authority took pragmatist philosophy’s belief in scientific intervention in society and tried to enact it through the objectification and analysis of social problems and intervention in social life (Scott, 1998). For a variety of projects, this search for capacity and tools took advantage of and fed the development of the professional social sciences in the late 19th century. As Ross (1991) has explained, amateur social science in the late 19th century slowly evolved into a more professionalized set of disciplines in the early 20th century, often in service to businesses or social agencies as well as evolving disciplinary notions of scientific objectivity.

Ross (1991) used the early history of the American Social Science Association and economics as her focal point, but the same pattern is true for psychology and especially its relationship with public schooling. In the United States, psychology slowly professionalized in the Progressive era, with a key core of academically trained psychologists defining the field as the science of individual differences and allying themselves with school administrators (e.g., Danziger, 1994). In education, what began as amateur involvement in the field in the child study movement turned into a professional relationship, with consulting and educational ties between educational psychologists such as Edward Thorndike, on the one hand, and school administrators, on the other (e.g., Jonçich, 1968). The colonization of schools by psychology was a development often highly desired by administrators, and it had century-long

consequences for both education research and educational practices (e.g., Condliffe Lagemann, 2000; Johanningmeier & Richardson, 2008).

### **Tools Used in the Creation of Special Education**

One of those consequences was that psychology became the most accessible disciplinary ally for Progressive-era school administrators seeking to manage school systems (Tyack & Hansot, 1982). The budding field of psychology claimed to wield the techniques that administrators could use to manage schools. This not only created but changed the nature of the tools administrators had at their disposal. One such tool was testing; while some form of standardized testing has been used in the United States as a vehicle for public accountability on and off since the 1840s (Reese, 2013), the industry of testing became formalized and rationalized in the early 20th century, and its purpose shifted from accountability to sorting. Sorting tools included the IQ test, pushed extensively after World War I, but subject-specific tests played a substantial role as well; Stanford psychologist Louis Terman developed both the Stanford-Binet IQ test and the Stanford Achievement Test, both of which were available to school administrators (Dorn, 2007). The key technique in the process of forming students with disabilities as objects was not tied to a specific test but, rather, the concept of testing students and using the results to classify them and manage their opportunities (Mazzeo, 2001).

One result of the broad use of tests to classify students and stratify the opportunities available to them was the engraving of contemporary prejudices within the bureaucratic routines of schools (Richardson & Parker, 1993). The institutional prejudices of testing and tracking in the early 20th century lasted for decades, and for students judged unable to benefit from schooling on the basis of tests, this routine justified the exclusion of hundreds of thousands of children from schools until the last quarter of the century. For school administrators, the bureaucratic use of testing and stratified education served multiple purposes. It was a tool for managing the reputation of large urban systems (e.g., Labaree, 1988); it justified a broad variety of ways of dividing students and providing limited services to many; it maintained their professional relationships and consulting contracts with many of the faculty who had taught superintendents and other administrators in graduate programs (e.g., Tyack, 1974); and it provided a claim to management expertise for administrators in the early 20th century, a claim that administrators used to buffer themselves from political pressures (Tyack & Hansot, 1982).

### **The Invention of Special Education and the Triangle of Expertise**

This growth of civil administrative power was the essential context for the invention of special education in urban school districts. School administrators were public agents of Progressive social engineering, and they managed both educational opportunities and the largest collection of public buildings and spaces in American cities. Together with new professional, disciplinary expertise, this administrative authority

and urban context is often missing from the historical literature on special education. Gould (1996) and Franklin (1994) have pointed to the ideological prejudices in the early days of special education. However, those prejudices would not have persisted without some underlying authority. That authority was a foundation for the 20th-century discourse of disability, a dominant discourse that assumed a universalized study of difference.

The tie between administrative authority and the discourse of special education lay in three connected features: the objects of study in the field, the evangelism of experts embedded in personal and professional networks, and the technical tools that experts and their public partners used in practice. We can call this set a triangle of expertise: objects, experts, and tools. This triangle of expertise appears repeatedly in the Progressive era: Colonized populations were objects studied by White anthropologists in service to European states and the United States (Asad, 1979; Lewis, 1973). Chemical compounds were the objects of study by hundreds of doctorally trained applied chemists hired by industry, with the synthesis of materials as the tool (Bensaude-Vincent & Stengers, 1996). Economies and markets were objects studied by professional economists in the service of the same industrial corporations, with classical economic and later specific market analysis as key tools (Ross, 1991). Poverty was the object studied by the new profession of social work in the service of municipal authorities and wealthy patrons of charity, with casework as the tool (Austin, 1983). Disability and people with disabilities made up an essential object studied by early educational psychologists in service to school authorities, with testing and classification as mediating tools (e.g., Jonçich, 1968).

The object-formation process can only be meaningful in the specific cultural-historical context of nation building in the United States through “the fatally dynamic coupling of power and difference” (Gilmore, 2002, p. 15). Today, nationally and perhaps internationally, the most powerful cultural artifact in the formation of “mental disabilities” is the *Diagnostic and Statistical Manual of Mental Disorders* (DSM). The earliest form of *DSM* was found in the 1840 census under the category of “idiotcy/insanity,” and it appeared again with a more developed form in the 1880 census with seven categories: mania, melancholia, monomania, paresis, dementia, dipsomania, and epilepsy (American Psychiatric Association, 2016). In the early 20th century, professional psychologists in the American Medico-Psychological Association and the National Commission for Mental Hygiene joined forces with the Bureau of the Census to collect standard information about mental illness, determining its boundaries (American Psychiatric Association, 2016). Altogether, these structures and tools evolved into *DSM*; along the way the process moved from gathering “useful” information for the state to producing uniform diagnostic criteria (demarking mental illness from mental health). *DSM* includes diagnostic criteria for SLD, ID, and the various forms of ED (e.g., oppositional defiant disorder).

Triangles of expertise were the Progressive-era context for the definition of disability within institutional contexts. Across a broad range of fields, these triangles did not blossom simultaneously, neatly, or only in the Progressive era. Nonetheless, the

Progressive era witnessed surprising growth in triangles of expertise connecting new disciplines to system authorities, officials in search of administrative capacity and power. The expansion of administrative power and triangles of expertise can explain the maintenance of prejudices and ideologies in schools, a set of practices that continued long after the heyday of the scientific racists. Social constructions consisted of not just ideological objects but definitions tied closely to institutional structures and practical needs (e.g., Hacking, 1999). With the growth of urban systems in the Progressive era, institutional structures were copied by organizations in the same field—for education, by individual school districts and states. This institutional mimesis carried with it the triangle of expertise (DiMaggio & Powell, 1983). As school administrators copied what they saw as common and useful professional practices, they retained key features—the definition of objects that motivated the mimesis, connections to networks of expertise that expanded with the practice, and the tools that could be described, demonstrated, learned, and replicated.

This was a bureaucratic replication of the triangle of expertise across jurisdictions. The replication of the triangle affirmed the power of individual school districts as administrative regimes. Especially in education, where administrative power carried the authority of the state, disability became an object studied by experts, managed by administrators, and defined with the power of the state (Richardson & Parker, 1993). Psychologists and psychiatrists defined conditions of exclusion and classification for disability, and members of those professions often made individual judgments on classifications. They were hired by superintendents wanting to manage student populations, using the legal authority of the state to shuttle children into different educational experiences and exclude others entirely from school. Institutional routines and tools contained ethnic and racial prejudices embedded in the early 20th-century disability discourse—the easy assumption by mostly White, Protestant school officials that East European immigrants were less intelligent and capable than native Whites. That prejudice had its direct descendant in the later segregation and labeling of Puerto Rican students in New York City and Mexican American students in Riverside, California (Franklin, 1994; Mercer, 1973; Nieto, 2003)—labeling that once again played a role in the management of metropolitan schools and limited the ontological assumptions about children's capacity once they entered public spaces defined as schools. School routines established to identify, label, and separate continued to operate for decades, with key features untouched.

### **Consequences of the Progressive-Era Creation of Special Education**

The invention of special education in the Progressive era thus had long-term consequences for schools and children, not just in transitory bureaucratic routines. Beyond bureaucratic mechanisms, schools became a vehicle for maintaining the Progressive-era discourse of disability. We see this (and all) discourse as a potential license for behavior. This license can exist at either the institutional or individual level. Dominant discourse is often a license for institutional behavior; thus, the inter-sectional specifics of disability discourse in the early 20th century licensed

immigration restrictions, the forced sterilization of poor women, the growth of school segregation, and more. Discourse can also be co-opted—the more humane interpretations of disability thought in the early 20th century gave room for entrepreneurial educators such as Elizabeth Farrell. Farrell's efforts to create ungraded classrooms in New York City carved out a sphere where some children certainly had more educational opportunities than would have existed otherwise (Hendrick & MacMillan, 1989). And yet, that individual action by a humane teacher was co-opted in the early 20th century in a discourse of expertise with an object: disability and individuals labeled as disabled. What Farrell created as a humane educational environment for students in the early 20th century became a tool for restricting the opportunities of students for decades to follow. School practices are the institutional embodiment of ontologies of human capacity. The discourse surrounding those practices both embodies and maintains epistemologies describing how educators learn about and respond to human diversity. In the case of special education, Farrell's humane efforts were islands in an ocean of limited definitions of human capacity and narrow ways of seeing difference. In most of the 20th century, even the most humane "teacherpreneur" (e.g., Berry, Byrd, & Wieder, 2013) could not raise general practice above bureaucratic routines that identified students whose opportunities were to be limited. Even the most avid "cage-busting" teacher (e.g., Hess, 2015) could not fight a discourse embodied in professional training, the courses in colleges of education that defined individual differences as the object of purely psychometric study.

That co-optation of Farrell's invention happened under the guise of expert, objective, and objectified judgment. In the Progressive era, social science and behavioral expertise emerged out of an evangelistic belief in the utility of professional, putatively scientific expertise, on the one hand, and the creation or co-optation of structural and bureaucratic tools, on the other. The first was tied to the constructed ontology of disability, and the second was tied to the official epistemology of difference. That combination of evangelism and tools required an object or objects of study and manipulation. In the first third of the 20th century, disability and individuals labeled as disabled became the objects for the professional class of psychologists and administrators certain that they could manage disability in public education and in other institutional contexts. It would remain for later generations to take the idea of protection, and the legacy of 19th-century social welfare ideology embedded in schools, and use that concept as a hook for civil rights activism to reform school practices.

## CHANGES AND CONTINUITIES

### **Consolidation of the Intersections of Difference With Disabilities (1960s–1990)**

Many of the features of the earlier objectified discourse around disability had inverted by the end of the 20th century: Most important, those in the United States who argued for universal education won the battle by the late 1970s. The victory of equal opportunity rhetoric and some institutional structures should not be

undersold; it meant access to education for hundreds of thousands of children after 1970 whose counterparts in earlier generations were often excluded from public schooling. On the other hand, other key features of the older discourse remained, especially the links between deficit assumptions and the institutional repertoires of separation and unequal opportunity. The creation of individual rights was layered over the older discourse of problem children as objects of expertise.

This incomplete, messy nature of discourse transitions shows how large paradigm shifts can be leaky. This leakage is common in historical change, and it reflects both the lagging change in what administrators, educators, and others in individual roles understood as disability and the social networks and institutional structures that reinforced preexisting definitions of human capacity and diversity. Courts may have required the desegregation of schools, but the disproportionate placement of African American students in special classes followed. Separate classes for students with disabilities constituted far more access than prior exclusion from schools had, but it became a mechanism for second-generation segregation.<sup>8</sup> One can make similar observations for the intersectional role of disability with regard to social class, gender, language, and other categories of difference. Since the post–World War II civil rights legislation, intersectionality around disability and difference has played havoc with the concept of student rights as the primary reform mechanism in public education. If intersectionality is not the only barrier to effective education for a diverse population, it is an important complicating factor.

The broader discourse around educational inequality in the 1960s was embroiled in debates over poverty, race, and culture. There had long been a tension in the country's social welfare debates about the “worthy” as opposed to the “unworthy” poor, with many social policies attempting to make judgments and regulate the behavior of poor families and poor single adults (Katz, 1996). Through the past half century, a significant strain of writing has targeted poor people's cultures and habits as the main cause of problems for poor children and adults in education, the labor market, and other areas of life (Greenbaum, 2015). The modern version of debates about virtue and poverty implied that government in general is not responsible for addressing poverty. This justification for *laissez-faire* policies has vied with arguments emerging at the same time that schools are the key lever for addressing poverty and more so that schools must serve the national interest in economic productivity and competitiveness—twin moral panics in which schools and teachers have the major targets of action (Goldstein, 2014). In the same way that the Progressive-era invention of special education emerged from social developments at the time, modern special education practices emerged at a time of vivid debates about the proper role and capacity of schools, with issues of equality, race, and national imperatives in the foreground.

This period was characterized by continued entanglements of disability with other markers of difference. New in the late 20th century was the effort of a broad coalition of individuals with disabilities and other disability rights activists, building on the efforts of the postwar civil rights movement (Fleischer & Zames, 2012; Pelka, 2012; Pfeiffer, 1993; Scotch, 1989; Shapiro, 1994; Winzer, 1993).<sup>9</sup> That development

relied in part on the emergence of a discourse on individual rights for racial minorities and individuals with disabilities. This emphasis on individual rights was both a lever and a limitation in the civil rights movement and the fight against segregation (e.g., D. A. Bell, 1987; Ladson-Billings, 2004; see also Tate, 1997). In modern political discourse, disability has a dual nature that reflects the dual nature of children's rights discourse.<sup>10</sup> In the context of disabilities, the construction of rights as *liberatory* (e.g., children's speech rights in *Tinker v. Des Moines*, 393 U.S. 503 [1969]) competed with the construction of children's rights as *protective*, the modern inheritance of views about the innocent and priceless child (Grossberg, 2011; Zelizer, 1985).

Debates about disability rights added a wrinkle with regard to the idealized right to an education. After Congress and the executive branch adopted new federal policy for children and youth with disabilities, other debates ensued over inclusion and the maintenance of separate environments for children with disabilities (e.g., Fleischer & Zames, 2012). This debate among individuals with disabilities and their families, disability rights activists, researchers, and educators overlapped with the postwar tensions in the rhetoric of children's rights. Through this transition and the expansion of special education, the role of disability and individuals with disabilities changed, from an object of expert interaction with schools at the beginning of the century to a boundary object at the end, a conceptual object that was a malleable entity for multiple stakeholders connected to special education. The boundary object of disability exists across spaces in a "virtual community" among school officials, professionals, parents, students with disabilities, researchers, and policy makers. Dumit (2004) explained that virtual communities are "dispersed in space, and although each participant is not necessarily connected directly to every other one, they all interact indirectly with each other via technologies of communication" (p. 11). In this sense, the growing infrastructure of special education, with its attendant technologies of professional standards, policies, technical procedures, and so forth, served a primary role in the creation and maintenance of these virtual communities in which the boundary object of disability has existed.

### **Civil Rights and Disability Rights**

The standard story of the post–World War II disability rights movement is that both inside and outside education, the expansion of disability rights paralleled the primary postwar civil rights movement that focused on race and ethnicity (e.g., Gliedman & Roth, 1980). The earlier wave of efforts by the National Association for the Advancement of Colored People, the American G.I. Forum, the Southern Christian Leadership Conference, and others provided examples of philosophy, tactics, legal structures, and the concept of a broad and inclusive citizenship that supported demands for equal access to education. The modern disability rights movement eventually landed on a combination of individual rights and participation ("Nothing about us without us") and successfully provoked a redefinition of human capacity as well as concrete policy actions (e.g., Pelka, 2012; Shapiro, 1994). This effort pushed



back against the ontology of disability created decades ago. The postwar civil rights movement around the rights of individuals with disabilities reached its legislative zenith with the Americans With Disabilities Act of 1990, a broad civil rights statute that expanded on rights embodied in Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. §794) and the Education for All Handicapped Children Act of 1975 (also known as Public Law 94-142, now the Individuals With Disabilities Education Act [IDEA]).<sup>11</sup> Behind those apparent parallel histories, there were important crossing points: the justification of segregation by South Carolina's lawyer on the grounds that desegregation by race would force schools to admit children with disabilities (J. W. Davis, 1952, as quoted in Pelka, 2012, p. 1), the federal court order striking down extreme tracking in the District of Columbia (*Hobson v. Hansen*, 269 F. Supp. 491 [D.D.C. 1967]; Tropea, 1987), and the growing disproportionality of suspensions and placement in special education by race during desegregation (Children's Defense Fund, 1974; Dunn, 1968; Heller, Holtzman, & Messick, 1982; Robert F. Kennedy Memorial & Southern Regional Council, 1973). The result was inconsistent and highly localized educational opportunities that often resulted in the disproportionate placement of children from African American and Latina/o households in special education, disproportionate placement without the appropriate education that federal law putatively promised. This was the local, geographic expression of broader social dynamics and had consequences for specific communities—in the fallout of desegregation, for example, Southern school districts often closed previously all-Black high schools that had served for several decades as keystone institutions of communities (e.g., Cecelski, 1994; Shircliffe, 2006; Siddle-Walker, 1996).

In addition to the high price of racial desegregation that African American communities and educators paid, this expression became disproportionate placement in special education by race. The dual nature of disability discourse is evident in disproportionate placements in special education. With the landmark Supreme Court case of *Brown v. Board of Education of Topeka* and seemingly equity-oriented national policy of racial desegregation, African American students whose neighborhood schools were closed and who were placed in formerly all-White schools were over-represented in special education classrooms with the label of ID (Dunn, 1968). Disproportionate placement was possible because of bureaucratic routines that still relied on older definitions of human capacity and institutionalized knowledge about children with disabilities as holding deficits within themselves. The expansion of rights for children in the late 20th century added another layer to disability discourse but did not capture all of the discourse.

### **Legal Discourse and the Messy Legacy of Disability Rights**

The standard civil rights framing of the post-World War II legal discourse in education portrays the broader debate as a battle over individual rights in education, rights tied to citizenship and educational justice. It is certainly true that the political uses of the lawsuits commonly focused on an individual right to education tied to

citizenship, while defendants tried to persuade the courts and the general public of the limits of school district and state obligations. This legal discourse of rights intersected with race and language in several places where lawsuits challenged the professional authority of school districts in their practices of testing students and placing them in special education. In *Diana v. California State Board of Education* (No. C-70, RFT [N.D. Cal. 1970]), representatives of nine Mexican American students successfully argued that assigning the children to “Educable Mentally Retarded” classes on the basis of English-language testing violated the students’ rights when the students’ primary language was Spanish. In *Larry P. v. Riles* (343 F. Supp. 1306 [N.D. Cal. 1972]), plaintiffs challenged IQ testing in San Francisco as culturally biased. As Richardson (2000) noted, the court record on such cases is mixed during this period, with a few successful challenges to common practices but frequent court rulings that sided with school districts. In this era, as in prior eras, disability discourse and policy were inextricably intertwined to stress a paradigm that emphasized individual factors and pushed identity intersections to the background. That intersectionality easily accommodated the language of individual rights, even while a rights framework was not an assured method of addressing unequal treatment in schools.

This modern assertion of an individual right to education took as its starting point the 19th-century bundling of education with citizenship: education both prepared students for citizenship and was a right of all children (Katznelson & Weir, 1985). Yet that framework of individual rights to an education was layered onto an older framework of legal discourse that saw rights very differently. The major shift in how courts treated children between 1850 and 1930 focused less on the individual rights of children than on the need to protect the “priceless child” (Zelizer, 1985), the authority of the state to impose compulsory education requirements (Provasnik, 2006), and the countervailing right of parents to guide their children’s education, including in private schooling (e.g., *Pierce v. Society of Sisters*, 268 U.S. 510 [1925]; Tyack, 1968).

The result was a postwar discourse that saw two very different meanings of children’s rights. On the one hand was the right of children to access education and make important choices including speech—what Grossberg (2011) has called a *liberatory* rights framework. Yet there was also an alternative framework, which Grossberg has termed a *protective* definition of children’s rights—the legacy of the “priceless child” ideology. We should remember, however, that the idea of rights had different meanings when applied to immigrants and racial minorities (particularly African Americans), and thus, parallel discourses about rights unfolded in this period. It is already the case that courts are crude and inexact mechanisms for political change (Ladson-Billings, 2004). Given the bifurcated nature of children’s rights as discourse after World War II and the disparate meanings that were mediated by race and immigration status, it was inevitable that when advocates pushed for the assertion of civil rights in education, debates followed about what those rights meant in operation. The notion of “policy assemblages” helps us understand that

policies are never the pure application of rational guidelines or the result of powerful individuals but multifaceted processes in which a multitude of entities, all of them carrying different agencies, intervene

and are continually reenacted, changing the policy's outcome in accordance with the presence/absence of certain articulations and practices. (Ureta, 2014, p. 303)

Policy assemblages have been at play in the historical trajectories of disability and its intersections, especially in elementary and secondary education where legislated rights have often given discretion to local school districts and school officials, where school districts can win cases if they do not commit egregious violations of process and demonstrate that they followed professional educational standards (Yell & Drasgow, 2000). The consequence was the legal affirmation of what Weatherley and Lipsky (1977) described as “street-level bureaucracy,” decision making that educators at the local level had to perform under pressure. It is in that local context that disproportionate placement in special education occurs; the geography of implementation and policy expression matters. Both the local implementation of special education laws and the history of disproportionate placements (e.g., Fleischer & Zames, 2012; Tropea, 1987) make clear that the dual nature of disability can have bureaucratic expressions in different ways that have profound influences on the lives of children. The roots of that expression often lay in older and familiar practices of school systems. The bureaucratic response to expanded educational rights needed techniques with which schools were familiar and which also had the patina of authority, an authority that schools often lacked after 1950 (Tyack & Hansot, 1982).

### Classification Schema and Boundary Objects

In their search for authority, school officials and regulators relied on the existing technical tool from the Progressive era: the craft and discourse of classification. By the late 1960s, in the aftermath of unprecedented sociopolitical upheaval,<sup>12</sup> the triangle of expertise that tied psychology to school administrators had been incorporated into school routines and the professional infrastructure of local school systems. When the Education for All Handicapped Children Act passed in 1975, and other legislation and regulations forced states and local districts to change their practices and expand access to education, they turned to that professional infrastructure: pupil personnel offices and school psychologists, for whom classification of children into the various categories of special education service eligibility was an expansion of their prior routines. This mandate for “child find” and classification for services did *not* overturn but, instead, reinforced the authority of school districts and their implicit authority:

Since bureaucracies are themselves elaborate classifications, their work centers on classifying and assigning, with variations in classification *practice* at various levels of government testifying to the political process inherent in officials (the classifiers) exercising power over subjects (the classified) through intermediate agents that apply classificatory rules. (Powell, 2011, p. 79)

Again, geography mattered, as less than two decades before, many school systems in the South had used school psychologists in the bureaucratic routines that maintained segregation through pupil-placement rules throughout Virginia, in Atlanta, and elsewhere (Dorn, 1996). Psychologists in the same roles were in use a short time later, to

classify students regarding eligibility for special education services. The intersectionality of disability and special education was embedded in school systems' bureaucratic roles and technical infrastructures. The outcomes of these practices, however, could not be explained simply on technical grounds, as the emerging policy assemblages created contexts that were embedded in unique politico-historical matrices of influence and infrastructures, and as Star and Ruhleder (1996) reminded us, infrastructures are relational.

The ease with which routines became adapted to the new legal protections in special education did not eliminate conflict over the extent of the right to education or the nature of disability as an object. Administrative law hearings and court cases became the civil trench warfare within which lawyers for schools and parents slowly defined and redefined the obligations of school systems after the mid-1970s. The legal battles in special education were matched by questions about the inherent validity of disability categories embedded within federal law. Between 1965 and 1985, the proportion of students identified as having ID declined or remained stable, while a new category, specific learning disabilities, quickly grew to include the plurality of all students receiving special education services (Lyon, 1996). In the 1980s, writers such as Carrier (1986), Sigmon (1987), and Sleeter (1986) asserted that there was no biological or psychological coherence to the SLD category and that its growing use was a result of ideological and social-class maneuvering, the category emerging as a social construction rather than an independently objective category. In particular, Sleeter argued that the category of SLD allowed White middle-class parents to secure resources for struggling children without having the same label ("mentally retarded") that had become much more commonly associated with African American students, at least in the late 1960s and early 1970s.

This critique of SLD as socially constructed and ideological was interesting and provocative in the late 1980s, roughly a decade after the federal government issued regulations to implement the right to an education for all students. And yet, the focus on ideological uses of disability categories omits the connection with school bureaucracies and administrative routines. At the time, African Americans were already disproportionately to be placed in special education for ID, SLD, and ED. Regardless of the potential for the category to be used as a softer, less stigmatizing label than "mental retardation" (Sleeter, 1986), the practice of schools incorporated SLD as a useful tool for declaring eligibility for special education. This development does not make sense if the category is only ideological, but it makes great sense if one understands special education's postwar history as one where the constructs around disability became potentially useful categories for action in schools, a boundary object inhabiting multiple activity systems.

We see special education categories as boundary objects because of the conflicts over their integrity and utility. In part this is the historical working out of epistemology in a field: Special education was embedded in a set of social practices that both required and deepened professional authority. That epistemological practice became contested in the late 20th century, but not just as a set of professional practices; the

broader definition of human diversity and value was at stake. If disability was a useful object in the triangle of expertise at the beginning of the 20th century, its role as an object shifted after 1960 as a growing number of groups fought over what the purpose of education was, what equal educational opportunity required, and how special education may or may not serve those goals. With these debates, disability was no longer the focus of a relatively small group—mostly administrators and psychological professionals—and instead disability categories became objects over which many different interest groups met.

### **The Building Blocks of Disability's Fluid States: Definitions and Classifications**

Even if there was no consensus on the definitions of SLD, ID, and ED, the categories and terms around disability provided the raw material for the creation of *boundary objects* (Bowker & Star, 2000; Star & Griesemer, 1989). Classification structures do not have to be coherent or consensual to serve these ends—the infrastructure of classifications grew in the postwar era even while the details were in dispute. The American Psychological Association staked a claim to the process of individual assessment for special education eligibility. The Council for Exceptional Children and advocacy organizations fought for training and professional licensure around categories, and the National Institutes of Health and the U.S. Department of Education provided research and training funding for activities often defined by categorical terms.<sup>13</sup> The machinery of classification ground on during disputes about definitions because disability categories were too useful to discard in a very practical sense—the paradigmatic example of a boundary object. The dilemmas related to the ambiguities of disability definitions have also been evident in other disability arenas such as the Americans With Disabilities Act, which led Crossley (1999) to describe this state of affairs as the disability kaleidoscope.

With the growing use of disability categories as boundary objects, the bureaucratization of special education in the latter 20th century ensured that students with disabilities remained part of objectified routines. Those routines were not neutral in ideology. First, the bureaucratic routines of classification created an inertia around the historical racialization of disability; federal special education laws may have attempted to prohibit discriminatory assessment practices, for example, requiring individualized assessment for special education eligibility in a student's primary language, but the disproportional placement of African American students, students whose first language was not English, and other children from commonly marginalized groups remained an entrenched pattern through the century's end (Donovan & Cross, 2002). In addition, as noted earlier, the broader postwar legal discourse contained an inherent tension between children's rights as liberatory and their rights as protective. With growing debates over inclusion in the 1980s and 1990s, the role of placement routines became part of that debate (Brantlinger, 1997).

At this point, it is important to step away from a narrative focused on organizational structures and ideologies. The histories, laws, procedures, labels, and tools

built around disability are experienced directly in the life of individuals with disabilities. As Lefebvre (1988) wrote, “Everyday is a kind of screen, in both senses of the word; it both shows and hides; it reveals both what has and has not changed” (p. 78). In collecting narratives of youth of color educated in New York City with the SLD identification, Connor (2008) has presented how students experience the dual nature of disability. For example, Connor’s informant Michael explained how he understood his position within a school bureaucracy:

Once you are there, it’s just like a Hell. For you to get out of special ed., it’s not up to your parents, It’s up to your teachers. Your teachers have but so much power—it’s up to the school and the districts to get you out of special ed. If they don’t want to get you out, if they need a certain amount of numbers in that class, your behind is gonna stay in there until you graduate. Any kid can get into special ed. To get out of special ed., it takes Hell to get out of special ed. I think that’s the most hardest thing to do, to get out. When you get out of there, you do not want to go back. (p. 149)

Michael’s understanding of special education is as a social space that one can reference in physical terms—the difficulty of “getting out” and the desire never to “go back.” W. G. captured a very personal sense of disability’s dual nature, both protection and permanent labeling (what W. G. sees as empowering):

My advantage was being put in special ed. One of our classes was resource where you get extra help. You have *nothing to lose* because you have all the time in the world. Wow! I’m *improving* in all my classes. Once you’re learning disabled, it’s *never ending* because it follows you where ever you go. (p. 264)

In the modern era, the protective side of disability has not prevented schools from being sites of suffering (Dumas, 2014). The dual nature of disability as a both protective and limiting object is embedded in the lived experiences of the students analyzed by Connor (2008); they understand and can articulate it better than most educators and researchers.

### **THE PROTEAN NATURE OF DISABILITY INTERSECTIONS AND FRAGMENTATIONS IN CONTEMPORARY HISTORY (1990s TO 2016)**

At the end of the 20th century, debates about special education and disability continued to evolve. Controversies related to the meanings and roles of special education in an increasingly diverse society mediated debates about educational reform. Scholarship on disability definitions was still highly debated. Notably, student identity intersections played a substantial role in debates about definitions of high-incidence disabilities in this time period. For instance, various versions of the SLD definition were proposed in the late 1980s and early 1990s in which social skill deficits and comorbidity with attention deficit disorders were acknowledged or ignored (Hallahan, Pullen, & Ward, 2013). In the end, however, the definition used in the reauthorization of IDEA (2004) remained largely the same as the one found in the 1975 federal policy. At the same time, growing criticism focused on the achievement–aptitude discrepancy generally used to diagnose SLD. Research showed a weak

association between severe discrepancy and the impact of reading interventions—for example, there were minimal differences in the nature and quality of responses to reading interventions among low- and high-aptitude children (Bradley, Danielson, & Hallahan, 2002). In the 1990s, the debates about racial disparities in high-incidence disabilities intensified, which led to the publication of a second National Research Council report in a 20-year period (Donovan & Cross, 2002). This scholarship maintained a trajectory parallel to the research conducted on disability definitions and interventions, thus fragmenting the ways in which disability intersections were engaged in this field. The National Research Council report had a substantial impact in the special education field, contributing to the creation of the first national technical assistance center to address this long-standing problem—the National Center for Culturally Responsive Educational Systems—and the inclusion of racial disproportionality monitoring requirements in the 2004 reauthorization of IDEA. This constituted a rare convergence of policy assemblages in which attention to the intersections of disability, race, and social class crystallized.

In addition, the debate about placement (as a proxy for inclusion) that emerged in the mid-1980s with the regular education initiative and full inclusion movements evolved into the inclusive education movement in the 1990s. The special education placement debate became less polarized, as the inclusive education movement appropriated the notion of diversity to include ability differences, and the vast majority of learners with disabilities were educated in public school buildings (Fuchs & Fuchs, 1994).

In this section, we focus on the research discourse and on a crucial question: Has the advancement of disability rights (including in education) dramatically changed the way that researchers operate? To begin, we note that the scholarship on disability identification, interventions, inclusion, and racial disparities evolved in parallel fashion. Although substantial progress was made in the generation of research knowledge across all of these domains, there was little cross-fertilization across these research communities. Intersections with race, language, and cultural influences were largely invisible in these knowledge bases; this pattern has been present since at least the 1970s in special education, psychology, counseling, and child development research (Artiles, Trent, & Kuan, 1997; Graham, 1992; McLoyd & Randolph, 1985; Ponterotto, 1988). For instance, Artiles et al. (1997) reported that less than 3% of studies published in prominent special education journals between 1972 and 1994 focused on ethnic-minority students. Comparable patterns have been documented for other, subsequent periods—1994 to 2012 (S. Trent et al., 2014) and 1995 to 2009 (Vasquez et al., 2011).

Unfortunately, the invisibility of disability intersections with race, language, and other markers of difference in the empirical knowledge base continued in the most recent decade. We reviewed grants funded by the Institute of Education Sciences (IES) National Center for Special Education Research between 2004 and 2015. We started our review from the most recent reauthorization of IDEA (2004) and aimed to determine the extent to which culturally and linguistically diverse (CLD) individuals were

included in funded research projects. We defined CLD as individuals from nondominant racial and linguistic backgrounds (Latina/o, African American, Native American, Asian, and English language learners [ELLs]). This is an admittedly limited way to examine this issue, though it provides a useful indirect indicator of the attention in the research community to disability intersections. We based our analysis on reviews of grant abstracts. We assumed that these abstracts would offer critical information about study samples since research reporting guidelines require clear and specific descriptions of study questions, samples, and research contexts and procedures as means to gauge the rigor of studies and enhance the replicability of research (American Psychological Association, 2006).

We conducted an electronic search of funded research grants on the IES website (<https://ies.ed.gov/funding/grantsearch/>). We reviewed the reported abstracts that contained information about grant purpose, activities, sample, setting, research design and methods, and outcomes. If a grant included CLD participants or mentioned their cultural or linguistic diversity, we categorized it as a grant that took into account student sociocultural backgrounds.

There were 18 subcategories under special education research grants. We categorized them into three broad categories—(a) intervention research with students and families, (b) workforce research, and (c) other awards including autism spectrum disorder and special education research and development centers. We identified 340 funded projects since 2004 (see Table 1). Four grants under the small business innovation research subcategory did not report abstracts. Therefore, we excluded them from the review. The evidence showed that out of 336 funded projects, 39 special education projects (11.6%) focused on or mentioned CLD individuals. An analysis of the grant categories shows interesting patterns. Two hundred fifteen studies (64%) were intervention research with students and families. Of these 215 intervention studies, 28 (13%) focused on CLD individuals. The second category, workforce research, had 40 funded projects (12%). Of these 40 projects, two (5%) focused on CLD individuals. Last, in the third category, there were 81 projects (24%) funded by IES. Of these projects, only nine projects (11%) focused on CLD individuals.

Overall, since 2004, no IES-funded project specifically focused only on African American and Asian American students. Out of the 39 projects involving CLD individuals, there were five studies (12.8%) that included Latinas/os; one study (2.6%) included Native Americans; three studies (7.7%) included students from different racial backgrounds, including African American learners; and 10 studies (25.6%) included ELLs. Twenty studies (51.3%) mentioned CLD students in their abstracts but did not specify the racial and linguistic backgrounds of participants. Out of the 39 projects, eight funded grants (20.5%) had Spanish-speaking participants. A majority of the projects ( $n = 31$ ; 79.5%) focusing on CLD individuals did not report the language of the participants. In terms of disability categories, about half of the 39 projects ( $n = 20$ ; 51.3%) involving CLD groups focused on SLD, and three studies (7.7%) did not identify a disability category.



**TABLE 1**  
**Percentage (and Number) of National Center for Special Education Research–Funded Grants by Sample Demographics and Disability Categories, 2004 to 2015**

Demographics	Percentage (Number)
Race and ELL status of targeted population	
Latina/o	12.8 (5)
African American	0
Native American	2.6 (1)
Asian	0
Multiple race categories	7.7 (3)
Not specified	51.3 (20)
ELL	25.6 (10)
Language of targeted population	
Spanish	20.5 (8)
Not stated	79.5 (31)
Type of disability of targeted population	
SLD (general)	7.7 (3)
SLD (math)	10.3 (4)
SLD (reading)	33.3 (13)
Developmental delay	5.1 (2)
Autism spectrum disorder	5.1 (2)
Deafness	2.6 (1)
Language impairment	10.3 (4)
ED	10.3 (4)
SLD/ED/ID	2.6 (1)
All types	5.1 (2)
Not stated	7.7 (3)

*Note.* The grants funded by the National Center for Special Education Research cover 18 funding programs that include interventions with students and families, workforce research (professional development, postdoctoral training, early career), and other types of grants (e.g., technology, policy, finance). ELL = English language learner; SLD = specific learning disability; ED = emotional disturbance; ID = intellectual disabilities.

Despite small growth, these contemporary findings resemble the aforementioned previous reviews that make apparent the lack of attention to disability intersections with other sociocultural markers. While the disproportionality of placement is now a policy monitoring requirement, no feature of intersectionality is an essential organizing principle for federally sponsored research; meanwhile, “poor diagnostic procedures or discrimination seemingly still play a role in the disproportionate identification of certain groups” (Shifrer, Muller, & Callahan, 2010, p. 304). Peer-reviewed research grants and journal articles constitute the substance of a knowledge base in a scientific

field. The knowledge encoded in these publications and grant findings informs professional practices and policies, and thus, researchers leading these efforts play significant gatekeeping roles that define what counts as legitimate knowledge on a topic of study. Thus, these trends suggest that there is a largely color-blind knowledge base on disability and its intersections. This is a troubling contemporary fact given the demographic imperative that the education field faces today in light of the unprecedented growth of non-White, low-income, and linguistic-minority students across the United States.

How do we explain the persistent disregard for recruiting research samples that represent the diversity of the U.S. student population? Or the lack of information in research reports about these key dimensions of study participants? This state of affairs could be interpreted as evidence of boundary work—"the demarcation practices used to maintain a field's identity" (Artiles et al., 2011, p. 168; see also Gieryn, 1995)—in the special education field in which race, ethnicity, language, and other key identity markers are merely considered background variables not deemed essential in sample descriptions. Yet the findings are generalized to all learners. This means that CLD students in special education often receive academic and behavioral interventions that were designed and tested with samples that likely excluded CLD participants. This is a puzzling stance given the evidence against color blindness that reminds us of the structural weight of race (Bobo, 2011), the erosion of hard-fought gains in civil rights and equity agendas such as affirmative action (e.g., Executive Order 11246, Equal Employment Opportunity, September 24, 1965), school racial segregation, the Voting Rights Act (Public Law 89-110, 79 Stat. 437 [1965]), and the requirements to monitor racial inequities in disability identification.

We acknowledge, however, that some of the research on racial disparities in special education has shed light on disability intersections. For instance, while research shows the substantial contribution of poverty to a disability diagnosis, studies also show that race predicts special education placement after controlling for poverty (Skiba, Poloni-Staudinger, Simmons, Feggins-Azziz, & Chung, 2005). The greater risk for African American student disability identification in affluent schools, the lack of national overrepresentation of racial groups with high poverty levels (i.e., Latinas/os), and the disparate treatment (e.g., placement restrictiveness, provision of related services) of racial groups with the same disability labels illustrate the intricacies of disability intersections with social class, race, and location. This complexity reflects an important reality for children in the United States: intersectionality remains deeply embedded within the bureaucratic contexts of schools. In these contexts, school system actions are robust, flexible, and insulated from external accountability. In this way, we find opposition *and* progress on the intersection of disability and race during this historical period. A growing interest in the theorization of culture, space, power, and history promises to situate analyses of this problem in the larger social and economic contexts of inequality in U.S. society (Artiles et al., 2011).

An important insight of the research produced after 2000 is that the complexity of disability intersections is mediated substantially by geography and local contingencies.

**TABLE 2**  
**Comparison of States With Highest Risk Indices for African American and Latina/o Students by Disability Category, 1998**

Disability Categories	African American Students			Latina/o Students		
	State	Risk Index (RI)	White RI for State	State	RI	White RI for State
Intellectual disabilities	Massachusetts	6.28%	1.32%	Massachusetts	4.48%	1.32%
	Alabama	5.49%	1.80%	Nebraska	2.68%	1.99%
	Arkansas	5.29%	2.06%	Hawaii	2.41%	0.96%
Specific learning disabilities	Delaware	12.19%	7.15%	Delaware	8.93%	7.15%
	Rhode Island	10.38%	10.30%	New York	8.42%	7.03%
	New Mexico	9.99%	6.83%	New Mexico	8.21%	6.83%
Emotional disturbance	Minnesota	3.88%	1.88%	Hawaii	2.68%	2.39%
	Montana	3.58%	0.85%	Vermont	2.16%	1.80%
	Iowa	3.53%	1.05%	Maine	1.99%	1.73%

*Note.* Adapted from Donovan and Cross (2002).

In some locales, learners from a racial group can have a greater identification risk for a specific disability category at a low-poverty school, but the same racial group could have a lower placement chance in the same disability category at a high-poverty school (Waitoller et al., 2010). In other locales, student race might predict disability placement for ED and discipline disparities, irrespective of income, school demographics, achievement levels, and teacher demographics and education levels (Bal, Betters-Bubon, & Fish, 2016). Yet, in other locations, Skiba et al. (2014) identified several school protective factors (e.g., the percentage of African American enrollment) that buffered the risk for disproportionality. These patterns are related in part to the prevalence variability of disabilities across states and school districts (see Table 2). In this way, the idea of disability as a boundary object becomes visible in local practices across contexts. Since at least the 1990s, researchers have documented the wide unevenness in disability prevalence across states (Bocian, Beebe, MacMillan, & Gresham, 1999; Donovan & Cross, 2002). Factors that explain such variability include eligibility teams’ decisions to override state identification criteria for various reasons, resistance from school personnel to apply diagnostic criteria for various (e.g., fiscal, human resource, political) reasons, and manipulations of the assessment and eligibility processes (Reschly & Hosp, 2004). How these practices relate to issues germane to disability intersections with language, class, and race have not been adequately studied.

A subtle, yet potential contributing key factor to the ways in which disability intersections, particularly with race, tend to be ignored in the research community is what we describe as the disguising motility of race as a means of enforcing a color-blind disability ontology. In the process of determining the existence of a disability (SLD, ID, and ED), IDEA (2004) lists “cultural factors,” “environmental or

economic disadvantage,” and “Limited English proficiency” as exclusionary criteria. In other words, following the nature/biology and culture divide, if a learner is identified with a disability, then neither culture, nor class, nor language is supposed to be spoken of in relationship to her or his symptoms. The disguising motility of race describes how this category becomes both vocal and silenced as it moves in time across institutional contexts and practices.<sup>14</sup> The morphing nature of race is mediated in part by ideological assumptions encoded in policies and educational practices. Specifically, as students struggle (academically and/or behaviorally) in general education, their race speaks bureaucratically through the tracking of performance levels by student race, class, and language. Next, there are triggering events/circumstances that lead teachers to refer learners to assessment for disability identification purposes. Sometimes these triggering events are grounded in legitimate concerns about students’ developmental/learning difficulties, but we must also acknowledge that student race—among other markers of difference—also plays a substantial role in referral and other remedial practices (Harry & Klingner, 2014; Okonofua & Eberhardt, 2015). At this time, race becomes a *sotto voce* topic—both spoken and silenced, vocal and ignorable at the same time. Thus, although race is often disguised in the referral reasons noted in institutional records, it is still whispered as it crystallizes *ex post facto* in reports of racial patterns for discipline referral reasons (e.g., African Americans are referred for more “subjective” reasons [e.g., disrespect] than their White peers) or in the disproportionate referrals of certain racial groups to special education. Once race passes the gate of referrals, a sequence of practices ensues: the assessment process begins, professionals collect evidence, and the team of professionals reaches an official diagnostic decision. Race continues to move through these contexts and practices, sometimes whispered under policy requirements, other times plainly audible. For instance, professional guidelines call for attending to race and other markers of difference (e.g., language) when choosing assessment tools, conducting evaluations, and interpreting assessment results. Yet most professionals tend to ignore these guidelines (Harry & Klingner, 2014). In other words, race breathes through the assessment processes, but it is also silenced.

Next, disability definitions may identify cultural or linguistic differences as exclusionary considerations in diagnostic decisions (e.g., SLD); thus, eligibility teams must assume that although race and language are all over the evidence (audible if whispered), the implicit official admonition is that disability should not be intersectional. Despite the significant advances in special education infrastructures—for example, testing and assessment technologies, conceptual refinement of disability definitions—we must be mindful of the relational nature of infrastructures and that diagnosis is a “communicative practice [that is enacted] across a variety of culturally and situated activities” (Duchan & Kovarsky, 2005, p. 2). As we explain in the following paragraphs, race returns to the stage as contemporary accountability and special education policies require that schools track bodies of color by performance levels, and research shows the differential treatment of individuals with disabilities by race (e.g., White students tend to be placed in more inclusive settings; Skiba et al.,

2008). The disguising motility of race constitutes a key building block of the work that the boundary object of disability does across institutional contexts. It also sheds light on the workings of boundary objects in which intersectionality is at play (e.g., disability and race).

We can see the situational silencing of intersectionality in the relationship between accountability policy in general and special education policy at the federal level. Most prominently, the No Child Left Behind Act of 2001 (NCLB; signed into law in 2002) contributed to the complexities of disability intersections in the educational system. The most visible features of this policy were its accountability requirements and the reliance on student scores from standardized tests. Subgroups defined in statute encoded race and disability as important but separate classifications. Schools were expected to make Adequate Yearly Progress (AYP); otherwise, measures would be taken ranging from publicly labeling schools as “in need of improvement” if they did not meet AYP for two consecutive years to restructuring schools (including closure) after five consecutive years of missing AYP. Assessment results were reported by subgroups of students, including racial groups, low-income students, English learners, and learners with disabilities.

It is beyond the scope of this chapter to present a comprehensive discussion of NCLB. For the purposes of our argument, it suffices to acknowledge that the policy prompted wide protests and opposition, with arguments that NCLB created a “diversity penalty” (Darling-Hammond, 2007), with uneven distribution of qualified teachers across school districts with different socioeconomic levels, deterioration of teacher–student relations, and demoralized teachers (Nichols & Berliner, 2007; Valli & Buese, 2007).

On the other hand, NCLB intersected with other major policies and system-wide programs such as IDEA and Response to Intervention (RTI) in ways that created opportunities while solidifying barriers for subgroups of learners (e.g., Artiles, 2015; Artiles, Bal, & King Thorius, 2010). For instance, some commentators welcomed greater accountability for special education students, while others protested the narrowing of indicators to gauge learning (i.e., test scores) and the weakening of one of the hallmarks of special education, namely, the individualized education plan. Although NCLB allowed for the representation of previously invisible groups in accountability systems, the policy also made some of them invisible as it allowed waivers for achievement reports (e.g., students with disabilities). In other instances, ELLs left this label when they became proficient in English, thus perpetuating an underperforming ELL group. In this sense, NCLB black-boxed the movement of students across subgroups since it only required performance reports of already formed subgroups. In this logic, disability intersectionalities were invisible both in statute and in how the law created incentives for attention to the subgroups defined in an a priori fashion. Over time, despite small changes, the performance gaps among subgroups remained.

The overlap of NCLB and RTI also had important consequences. Contrary to NCLB’s a priori definition of subgroups, RTI defines subgroups over time, depending on their responses to interventions as the new way to identify students with

SLD. An interesting paradox is embodied in RTI, however. On the one hand, little systematic attention is given in the design of interventions to cultural issues or to the intersections of student risk or disability status with other identities. At the same time, RTI is assumed to be mindful of such intersectionalities since this model is expected to reduce racial disparities in special education. Of importance, emerging evidence suggests that over time, school districts and states are maintaining racial disparities in disability identification rates while complying with IDEA reporting requirements and, thus, avoiding consequences (Albrecht, Skiba, Losen, Chung, & Middelberg, 2012; Cavendish, Artiles, & Harry, 2014). We do not think that this was inherent in the intellectual construct of RTI. The continuation of older patterns illustrates how sticky school system behavior is, as well as how sticky ontological assumptions about disability and bureaucratic ways of gathering information are. The consequence is that school systems have treated reporting requirements as an object of ritual conformity—certainly not the first time schools have acted in this way. This form of ritual conformity (Artiles & Kozleski, 2016; Scheid & Suchman, 2001) with equity mandates demonstrates how the boundary object of disability navigates policy assemblages while allowing the educational system to communicate about disability across contexts and audiences, but with slightly different and consequential meanings and uses.

This section demonstrates how the last quarter century of research in special education had silenced discussions that effaced and sometimes erased intersectionality in special education. The shift from the No Child Left Behind Act of 2001 to the Every Child Succeeds Act does not change these dynamics sufficiently to eliminate the duality of disability as an object: Schools still must assess children annually in Grades 3 to 8 and must identify schools as low-performing based in a significant way on the results of these tests.

## CONCLUSION

We traced a cultural–historical critique of the paradoxes of disability, arguing that its construct has consistently contained a dual nature. From the creation of a triangle of expertise a century ago through the disability rights movement and the modern era of special education law, we see a tension between disability’s use as an object of protection and its use as a bureaucratic mechanism embedded in unequal education. In its recent history, it has embodied both protection and inequality. In its bureaucratic and scholarly expressions, disability today is embedded within test-based accountability and a generation of scholarship that too often effaces its intersectional nature. We use the notions of intersectionality and boundary objects to examine the fluid nature of race and disability and document “boundary work” to understand epistemological practices in this field that make race and disability visible and invisible notions. Of importance, we note how a culture- and race-neutral system of disability with an explicit justice agenda (i.e., special education) can morph into a racialized identification system that eventually makes race disappear in its midst.

The startling absence of intersectional frameworks in federally funded special education research concerns us, in part because of the desperate need for new intersectional scholarship. For example, we think that a *rights in action* perspective can help us understand what happens *after* disability identification to learners whose identities are formed at the intersections of disability, race, class, gender, and language in/through multiple activity systems (Artiles, 2014). But our concern is not dependent on our particular epistemological claims. We are also concerned with the decontextualized nature of funded special education research because that invisibility is unnecessary. If the National Institutes of Health has required the inclusion of women and minorities in funded clinical research for almost a quarter century (National Institutes of Health Revitalization Act of 1993, U.S. Public Law 103-43), there is no reason why the Institute of Education Sciences cannot require intersectional research in special education. The prevalence of nonintersectional research is a renewed ontology without social context, risking the continued generation of disability as an intellectual construct apparently knowable primarily as a universal truth, amenable to decontextualized interventions. As we have argued here, disability is a historically contingent object, both protective and risky, with a localized/spatial context and its intersections as objects of protection and inequality.

We broaden the conceptual landscape of this scholarship by taking up a perspective that benefits from developments in the study of health and the body, while it is grounded in interdisciplinary insights from culture theory, social studies of science, critical geography, and cultural psychology, among others (Bowker & Star, 2000; Davis, 2014; Harvey, 2012; Soja, 2010). Our argument is in favor of intersectional scholarship, in favor of acknowledging the dual nature of disability as a boundary object. The fluid view of disability and other difference markers enables us to dispel static notions of people's identities and reenvision (e.g., raced and disabled) individuals as active *makers* and *users* of cultural tools and practices. That argument does not dictate the exact nature of the scholarship that might follow this recognition, but it does suggest a reasonable set of tests for scholarship on disability in the future: Does scholarship on disability avoid an essentialist, context-free definition of disability? Does it avoid reliance on administrative mechanisms as the solitary definition of either disability or knowledge about disability? Does it provide an avenue for contextualized ways of understanding human capacity and diversity?

The standpoint we advance stands in contrast with the biology–culture binary that has pervaded in the study of disability. On the one hand, disability has been historically conceptualized as a fixed, universal, and culture-free condition with biological origins and centered on the individual. Thus, a wealth of evidence has accumulated on the medical deficits of this population, and myriad interventions have been created to address such deficiencies. This perspective is consistent with the dominant paradigm of human development research in Western societies that relies on the biology–culture divide and privileges biology over culture, which is seen as a man-made (unnatural) part of the environment (Cole, 1996). Moreover, this

traditional formulation relies on the ontology of self-sufficient, free willing, morally directed individuals as the object of the theories of human development and learning (Popkewitz, 1997).

On the other hand, at least three approaches have taken up the role of culture in disability research (Artiles, Kozleski, et al., 2010). One is conceived from a “diversity” perspective, which tends to be equated with racial, ethnic, linguistic, and other minoritized groups. Both terms (*diversity* and *minority*) are deemed synonyms with culture. Taking “culture” as an external variable in a search for universal truth or “natural” mechanisms for disability and its effect on individuals’ thoughts and behaviors, this view tends to construe culture as a demographic factor, and it has permeated the study of disability intersections with race, social class, and language. More important, the idea of culture has evolved to become a proxy for race, which in turn is closely aligned with a deficit orientation—for example, “culture of poverty” and “culturally disadvantaged” are illustrations of these standpoints (Artiles, Kozleski, et al., 2010; Ng & Rury, 2006).

Second, scholars working with a social and political model of disability foreground the role of the social construction of disability. They stress how an ableist world—through its institutions, ideologies, and historical legacies—imposes barriers and silences people with disabilities. Third, a group of scholars has put forward a cultural–historical perspective that focuses on the cultural mediation of human learning and development to account for ideal and material notions of cultural artifacts within object-oriented collective activity systems (Cole, 1996; Engeström, 2015; Rogoff, 2003). This way, cultural dimensions of the actions and thinking of groups (professionals, racial or linguistic communities) and institutions (e.g., rules and division of labor) are brought to bear in studies of disability (Artiles, 2003, 2011; Bal, 2016). Unfortunately, there has been only little cross-fertilization across these three scholarly communities, particularly in the study of disability intersections (Artiles, 2013). Utilizing cultural–historical activity theory and participatory social justice perspective, Bal (2016) conducted a statewide formative intervention study, culturally responsive positive behavioral supports and interventions (CRPBIS). The CRPBIS study aimed to address racial disproportionality in behavioral outcomes by designing inclusive, ecologically valid, adaptive, and sustainable behavioral support systems with local stakeholders in the state of Wisconsin. CRPBIS uses the Learning Lab methodology, an inclusive problem-solving process, bringing together students, family members, educators, school leaders, and community members, specifically those who have been historically excluded from school’s decision-making activities (Bal, Kozleski, Schrader, Rodriguez, & Pelton, 2014). Learning Labs have been formed at five public schools. At four Learning Lab schools, members successfully examined outcomes in the existing behavioral support systems, identified systemic problems, and collectively designed culturally responsive schoolwide behavioral systems to be implemented in the subsequent academic years (Bal, 2016). Learning Labs have functioned as research and innovation sites for the schools, districts, state’s education agency, and researchers that crafted artifacts and actions such as collective system mapping and interactive data maps (<http://crpbis.apl.wisc.edu/>) for mediating expansive learning and transformative agency.



More recently, advances in medical and technology research, along with a dose of science envy (e.g., Ross, 1991), have contributed to a biological turn in the social sciences. Researchers have been searching for the genetic and biological roots of certain conditions. For example, aside from a number of genetically determined syndromes (e.g., Fragile X), investigators have reported that

outcomes of brain imaging are viewed as fairly reliable at the group level but not reliable at the level of the single subject. There is strong evidence to support how the central occipitotemporal region underlies development of reading fluency, but there is controversy over the neural mechanisms involved. . . . [Research also shows] that parts of the left-hemispheric posterior brain systems fail to function properly during reading for individuals with dyslexia. Recent studies have begun to focus on age-related changes in the neural system of reading. (Swanson, Harris, & Graham, 2013, p. 13)

Packaged in a discourse of diversity and inclusion, we have witnessed a trend to overlay a biological perspective on scholarship concerned with cultural categories, such as race. For instance, notwithstanding the absence of genetic evidence for the idea of race, some researchers aim to identify and treat race-specific illnesses. Epstein (2007) explained the politics of difference in medical research with the notion of the “inclusion-and-difference” paradigm. This perspective intertwines “the meaning of biological difference [with] the status of socially subordinated groups . . . [through the articulation of] a distinctive way of asking and answering questions about the demarcating of subpopulations of patients and citizens” (p. 18). This line of research responds to the historical underrepresentation of racial minorities in medical research (i.e., it enhances their social visibility), while it increases group representation, thus addressing the political pressure from advocacy groups. There are, however, potential negative repercussions of a biological paradigm of race and other markers of difference. Examples include the perpetuation of essentialist and subhuman views of groups (particularly of racial minorities) that may endorse violence against them, the erasure of social and structural influences in health and educational outcomes across groups, the justification of racial inequities and marginalization (K. Anderson, 2002; Artiles, 2011; Eberhardt, 2005; Goff, Eberhardt, Williams, & Jackson, 2008; Williams & Eberhardt, 2008), and the consolidation of a “new racial geneism” movement in education—that is, “the belief that genes shape the nature of ethnic group achievements and inequities” (Gillborn, 2016, p. 2). We should be reminded that these developments build on a long-standing tradition of biological reinscription of race in science, law, and medicine that, sadly, has been linked to “the broader history of exclusions, hierarchies, and classifications of the living world on which the modern European taxonomies of race were based” (K. Anderson, 2002, p. 27; see also Duster, 2015; Morning, 2014).

Unfortunately, these trends persist in scientific research—particularly in studies of disability intersections—and although efforts are being made to enhance the visibility and political representation of certain marginalized groups, there is an urgent need for a paradigm expansion that disrupts these legacies. This work entails the articulation of a biocultural–historical perspective on human development that

recognizes that “cultural history and phylogeny are interwoven *constituents* of ontogenetic development, not merely *influences*. . . . [T]he brain’s potential is not simply a matter of preprogrammed specialized modules, but depends crucially on culturally organized experience” (Cole & Packer, 2016, pp. 6–7). Of significance, scholars are advancing a cultural neuroscience approach to the study of cognitive functions and the architecture of the mind to understand the “complex interplay of genetic and experiential processes. . . . [These scholars argue that this line of research will shed light on] how the human mind and brain shape and are shaped by culture-gene coevolutionary processes” (Chiao & Immordino-Yang, 2013, p. 56). A biocultural paradigm requires the examination of embodied identities, for “bodies can be the sum of their biology; the signifying systems in the culture; the historical, social, political surround; the scientific defining points; the symptom pool; the technological add-ons all combined and yet differentiated” (Davis, 2014, p. 7). In short, a biocultural perspective calls for the “study of the scientificized and medicalized body in history, culture and politics” (Davis, 2006, p. 91).

Forging a biocultural paradigm requires an epistemological reflexivity and innovation to question the long-standing differential appreciation of the “hard” and “soft” sciences in understanding complex phenomena such as disability intersections. A biocultural paradigm can benefit from the scholarship on the social dimensions of science and knowledge production to identify theoretical and methodological shortcomings and the limits and affordances of epistemological practices. It calls for a “community of interpreters, across disciplines, willing to learn from each other” (Davis & Morris, 2014, p. 125). Moreover, a biocultural paradigm can rely on a cultural model of human development that accounts for institutional, interpersonal, and individual influences in individuals’ experiences. This standpoint aspires to bring forth an integrated understanding of the interplay of biological and cultural notions of disability that torque and traverse other identity markers (e.g., race and class). Future scholarship should not be satisfied with documenting racial gaps in achievement or

race-associated differences in health outcomes[, for] leaving the basis of those differences poorly explained is not benign but has at least three dangerous consequences. It impedes the advance of scientific knowledge, limits efforts at primary prevention, and contributes to ideas of biologic determinism. (Jones, 2001, p. 302)

The same logic applies to the study of racial disparities in special education (Shifrer et al., 2010). But to fulfill that promise, research must remain flexible in its understanding of human capacity and take advantage of the diversity of scholarship on human development. It must embody an understanding that disability intersections ought to be studied from situated perspectives (Artiles, 2011) and shift the analytic gaze to document nondominant groups’ cultural repertoires and the learning they do every day in tight circumstances (Dixon-Román, 2014; McDermott, 2010). As Chris Bell (2011) described it, “The work of reading black and disabled bodies is not only recovery work . . . but work that requires a willingness to deconstruct the systems that

would keep those bodies in separate spheres” (p. 3). Disability scholarship in the 21st century must take on the challenge to develop adaptive, socially just, locally meaningful, and sustainable systemic solutions to contemporary systemic crises.

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### NOTES

<sup>1</sup>Building on Star and Griesemer’s (1989) work, we use loosely the term *object* to describe what “people act toward and with; it may be a thing but also, for example, a theory [or a policy]” (Timmermans, 2015, p. 4).

<sup>2</sup>We use the term *cultural-historical* in a broad sense to encompass not only the scholarship on human development that falls under this construct (Cole, 1996), but also interdisciplinary traditions to engage notions of culture, identity differences, power, and historical legacies.

<sup>3</sup>We use intersectional in a broad historical sense, understanding that the relationships among categories have been dynamic and extremely consequential. We draw from the seminal critical race theory work of Crenshaw (1991) and other interdisciplinary scholars.

<sup>4</sup>Although the previous label for this disability category was “mental retardation,” we use “ID” to be consistent with contemporary practices. The early history covered in this chapter was grounded in the former term, but we use ID for consistency purposes.

<sup>5</sup>These are

objects which are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. They are weakly structured in common use, and become strongly structured in individual-site use. These objects may be abstract or concrete. They have different meanings in different social worlds but their structure is common enough to more than one world to make them recognizable, a means of translation. The creation and management of boundary objects is a key process in developing and maintaining coherence across intersecting social worlds. (Star & Griesemer, 1989, p. 393)

<sup>6</sup>While Cell focuses on the development of legal segregation codes in the American South and South Africa, racist White concerns about the social “pollution” of public space played a significant role as well in efforts to control political power in the South.

<sup>7</sup>This is in contrast with Gould’s (1996) focus on the ideology of scientific racist arguments.

<sup>8</sup>The written history of disability rights reflects the importance of institutional behavior in educational change: In a volume dedicated to tracing grassroots activism in the disability rights movement, Fleischer and Zames’s (2012) discussion of education focuses on legislation and lawsuits far more than on the voices of individuals with disabilities.

<sup>9</sup>An open question is the relationship between late 20th-century disability rights activism and earlier disability rights efforts, such as the depression-era employment protests documented by Longmore and Goldberger (2000).

<sup>10</sup>Winzer (1993) has framed the history of special education as a broad trend toward inclusion, a narrative of forward progress different from the argument we present.

<sup>11</sup>Martin, Martin, and Terman (1996) have traced the early postwar legislative origins of federal special education law in the United States; Winzer (1993) has provided a broader context.

<sup>12</sup>These events included the assassination of visible leaders (including the president of the United States and Dr. Martin Luther King), the growing struggles surrounding the civil rights movement, the emergence of the War on Poverty, and the Vietnam War, among others.

<sup>13</sup>More narrowly focused groups such as the Association for Children With Learning Disabilities were able to advocate for specific classification slots—leading to consequences such as the legal definition of SLD in the Children With Specific Learning Disabilities Act of 1969.

<sup>14</sup>Fine and Weis (2003) have discussed silencing as an important educational construct inside schools; we think that it is also a prominent (and equally dangerous) phenomenon in research.

## REFERENCES

- Albrecht, S. F., Skiba, R. J., Losen, D. J., Chung, C. G., & Middelberg, L. (2012). Federal policy on disproportionality in special education: Is it moving us forward? *Journal of Disability Policy Studies, 23*(1), 14–25.
- American Psychiatric Association. (2016). *DSM history*. Retrieved from <https://www.psychiatry.org/psychiatrists/practice/dsm/history-of-the-dsm>
- American Psychological Association. (2006). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.
- Anderson, J. D. (1988). *The education of Blacks in the South, 1860–1935*. Charlotte: University of North Carolina Press.
- Anderson, K. (2002). The racialization of difference: Enlarging the story field. *The Professional Geographer, 54*(1), 25–30.
- Artiles, A. J. (2003). Special education's changing identity: Paradoxes and dilemmas in views of culture and space. *Harvard Educational Review, 73*, 164–202.
- Artiles, A. J. (2011). Toward an interdisciplinary understanding of educational equity and difference: The case of the racialization of ability. *Educational Researcher, 40*, 431–445. doi: 10.3102/0013189X11429391
- Artiles, A. J. (2013). Untangling the racialization of disabilities: An intersectionality critique across disability models. *Du Bois Review, 10*, 329–347.
- Artiles, A. J. (2014, March). *Future research on the intersections of ability, race, and language differences: Re-framing the roles of history and poverty* (Inaugural lecture). University of Birmingham, Birmingham, UK.
- Artiles, A. J. (2015). Beyond responsiveness to identity badges: Future research on culture in disability and implications for RTI. *Educational Review, 67*(1), 1–22.
- Artiles, A. J., Bal, A., & King Thorius, K. (2010). Back to the future: A critique of response to intervention's social justice views. *Theory Into Practice, 49*, 250–257.
- Artiles, A. J., & Klingner, J. (2006). Forging a knowledge base on English language learners with special needs: Theoretical, population, and technical issues. *Teachers College Record, 108*, 2187–2194.
- Artiles, A. J., & Kozleski, E. B. (2016). Inclusive education's promises and trajectories: Critical notes about future research on a venerable idea. *Education Policy Analysis Archives, 24*(43). doi:10.14507/epaa.24.1919. Retrieved from <http://epaa.asu.edu/ojs/article/viewFile/1919/1766>
- Artiles, A. J., Kozleski, E. B., Dorn, S., & Christensen, C. (2006). Learning in inclusive education research: Re-mediating theory and methods with a transformative agenda. *Review of Research in Education, 30*, 65–108.
- Artiles, A. J., Kozleski, E. B., Trent, S. C., Osher, D., & Ortiz, A. (2010). Justifying and explaining disproportionality, 1968–2008: A critique of underlying views of culture. *Exceptional Children, 76*, 279–299.
- Artiles, A. J., Thorius, K. K., Bal, A., Neal, R., Waitoller, F., & Hernandez-Saca, D. (2011). Beyond culture as group traits: Future learning disabilities ontology, epistemology, and inquiry on research knowledge use. *Learning Disability Quarterly, 34*, 167–179.

- Artiles, A. J., & Trent, S. C. (1994). Overrepresentation of minority students in special education: A continuing debate. *Journal of Special Education, 27*, 410–437.
- Artiles, A. J., Trent, S. C., & Kuan, L. A. (1997). Learning disabilities empirical research on ethnic minority students: An analysis of 22 years of studies published in selected refereed journals. *Learning Disabilities Research and Practice, 12*(2), 82–91.
- Artiles, A. J., Trent, S. C., & Palmer, J. (2004). Culturally diverse students in special education: Legacies and prospects. In J. A. Bank, & C. A. McGee Banks (Eds.), *Handbook of research on multicultural education* (2nd ed., pp. 716–735). San Francisco, CA: Jossey-Bass.
- Asad, T. (1979). Anthropology and the colonial encounter. In G. Huizer & B. Mannheim (Eds.), *The politics of anthropology: From colonialism and sexism toward a view from below* (pp. 85–94). Paris, France: Mouton.
- Austin, D. M. (1983). The Flexner myth and the history of social work. *Social Service Review, 57*, 357–377.
- Baker, B. (2002). The hunt for disability: The new eugenics and the normalization of school children. *Teachers College Record, 104*, 663–703. doi:10.1111/1467-9620.00175
- Bal, A. (2016). From intervention to innovation: A cultural-historical approach to the racialization of school discipline. *Interchange: A Quarterly Review of Education, 47*, 409–427.
- Bal, A., Better-Bubon, J., & Fish, R. (2016). *A multilevel analysis of statewide disproportionality in exclusionary discipline and the identification of emotional disturbance*. Manuscript submitted for publication.
- Bal, A., Kozleski, E. B., Schrader, E. M., Rodriguez, E. M., & Pelton, S. (2014). Systemic transformation in school: Using Learning Lab to design culturally responsive school-wide positive behavioral supports. *Remedial and Special Education, 35*, 327–339. doi:10.1177/0741932514536995
- Bal, A., & Trainor, A. A. (2016). Culturally responsive research rubric for experimental intervention studies: The development of a rubric for paradigm expansion. *Review of Educational Research, 86*, 319–359.
- Barclay, J. L. (2011). *Cripples all! Or, The mark of slavery: Disability and race in antebellum America, 1820–1860* (Unpublished dissertation). Michigan State University, East Lansing.
- Barclay, J. L. (2014). Mothering the “useless”: Black motherhood, disability, and slavery. *Women, Gender, and Families of Color, 2*, 115–140. doi:10.5406/womgenfamcol.2.2.0115
- Baynton, D. (2001). Disability and the justification of inequality in American history. In P. K. Longmor, & L. Umansky (Eds.), *The new disability history: American perspectives* (pp. 33–57). New York: New York University Press.
- Baynton, D. C. (2005). Defectives in the land: Disability and American immigration policy, 1882–1924. *Journal of American Ethnic History, 24*(3), 31–44.
- Bensaude-Vincent, B., & Stengers, I. (1996). *A history of chemistry*. Cambridge, MA: Harvard University Press.
- Bell, C. M. (Ed.). (2011). *Blackness and disability*. East Lansing: Michigan State University Press.
- Bell, D. A. (1987). *And we are not saved: The elusive quest for racial justice*. New York, NY: Basic Books.
- Berry, B., Byrd, A., & Wieder, A. (2013). *Teacherpreneurs: Innovative teachers who lead but don't leave*. San Francisco, CA: John Wiley.
- Bobo, L. D. (2011). Somewhere between Jim Crow and post-racialism: Reflections on the racial divide in America today. *Daedalus, 140*(2), 11–36.
- Bocian, K. M., Beebe, M. E., MacMillan, D. L., & Gresham, F. M. (1999). Competing paradigms in learning disabilities classification by schools and the variations in the meaning of discrepant achievement. *Learning Disabilities Research and Practice, 14*(1), 1–14.

- Boster, D. H. (2015). *African American slavery and disability: Bodies, property and power in the antebellum South, 1800–1860*. New York, NY: Routledge.
- Bowker, G. C., & Star, S. L. (2000). *Sorting things out*. Cambridge: MIT Press.
- Bradley, R., Danielson, L., & Hallahan, D. (Eds.). (2002). *Identification of learning disabilities: Research to practice*. Mahwah, NJ: Lawrence Erlbaum.
- Brantlinger, E. (1997). Using ideology: Cases of nonrecognition of the politics of research and practice in special education. *Review of Educational Research, 67*, 425–459.
- Carrier, J. G. (1986). *Learning disability: Social class and the construction of inequality in American education*. Westport, CT: Praeger.
- Cavendish, W., Artilles, A. J., & Harry, B. (2014). Tracking inequality 60 years after Brown: Does policy legitimize the racialization of disability? *Multiple Voices for Ethnically Diverse Exceptional Learners, 14*(2), 30–40.
- Cecelski, D. S. (1994). *Along freedom road: Hyde County, North Carolina, and the fate of Black schools in the South*. Chapel Hill: University of North Carolina Press.
- Cell, J. W. (1982). *The highest stage of White supremacy*. New York, NY: Cambridge University Press.
- Chandler, A. D. (1977). *The visible hand: The management revolution in American business*. Cambridge, MA: Belknap.
- Chiao, J. Y., & Immordino-Yang, M. H. (2013). Modularity and the cultural mind: Contributions of cultural neuroscience to cognitive theory. *Perspectives on Psychological Science, 8*(1), 56–61.
- Children's Defense Fund. (1974). *Children out of school in America*. Boston, MA: Author.
- Christensen, C., & Dorn, S. (1997). Competing notions of social justice and contradictions in special education reform. *Journal of Special Education, 31*, 181–198.
- Condliffe Lagemann, E. (2000). *An elusive science: The troubling history of education research*. Chicago, IL: University of Chicago Press.
- Cole, M. (1996). *Cultural psychology*. Cambridge, MA: Harvard University Press.
- Cole, M., & Packer, M. (2016). A bio-cultural-historical approach to the study of development. In M. J. Gelfand, C. Chiu, & Y. Hong (Eds.), *Advances in culture and psychology* (Vol. 6, pp. 1–76). Oxford, England: Oxford University Press.
- Connor, D. J. (2008). *Urban narratives: Portraits in progress, life at the intersections of learning disability, race, & social class*. New York, NY: Peter Lang.
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review, 43*, 1241–1299.
- Crossley, M. (1999). The disability kaleidoscope. *Notre Dame Law Review, 74*, 621–716.
- Danziger, K. (1994). *Constructing the subject: Historical origins of psychological research*. New York, NY: Cambridge University Press.
- Darling-Hammond, L. (2007). Race, inequality and educational accountability: The irony of “No Child Left Behind”. *Race Ethnicity and Education, 10*, 245–260.
- Davis, L. J. (2006). Stumped by genes: Lingua gataca, DNA and prosthesis. In M. Smith & J. Morra (Eds.), *The prosthetic impulse: From a posthuman present to a biocultural future* (pp. 91–106). Cambridge: MIT Press.
- Davis, L. J. (Ed.). (2014). *The end of normal: Identity in a biocultural era*. Ann Arbor: University of Michigan Press.
- Davis, L. J., & Morris, D. (2014). The biocultures manifesto. In L. J. Davis (Ed.), *The end of normal: Identity in a biocultural era* (pp. 121–128). Ann Arbor: University of Michigan Press.
- DiMaggio, P., & Powell, W. W. (1983). The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields. *American Sociological Review, 48*(2), 147–160.
- Dixon-Román, E. J. (2014). Deviance as pedagogy: From nondominant cultural capital to deviantly marked cultural repertoires. *Teachers College Record, 116*, 1–30.

- Donovan, M., & Cross, C. T. (Eds.). (2002). *Minority students in special and gifted education*. Washington, DC: National Academies Press.
- Dorn, S. (1996). *Creating the dropout: An institutional and social history of school failure*. Westport, CT: Praeger.
- Dorn, S. (2002). Public-private symbiosis in Nashville special education. *History of Education Quarterly*, 32, 368–394.
- Dorn, S. (2007). *Accountability Frankenstein: Understanding and taming the monster*. Chapel Hill, NC: Information Age.
- Dorn, S., & Johanningsmeier, E. V. (1999). Dropping out and the military metaphor for schooling. *History of Education Quarterly*, 39, 193–198.
- Du Bois, W. E. B. (1935). *Black reconstruction: An essay toward a history of the part which Black folk played in the attempt to reconstruct democracy in America, 1860–1880*. New York, NY: Harcourt, Brace.
- Duchan, J. F., & Kovarsky, D. (2005). Introduction. In J. F. Duchan & D. Kovarsky (Eds.), *Diagnosis as cultural practice* (pp. 1–11). New York, NY: Mouton de Gruyter.
- Dumas, M. J. (2014). “Losing an arm”: Schooling as a site of black suffering. *Race Ethnicity and Education*, 17(1), 1–29.
- Dumit, J. (2004). *Picturing personhood: Brain scans and biomedical identity*. Princeton, NJ: Princeton University Press.
- Dunn, L. M. (1968). Special education for the mildly retarded: Is much of it justifiable? *Exceptional Children*, 35(1), 5–22.
- Duster, T. (2015). A post-genomic surprise: The molecular reinscription of race in science, law and medicine. *British Journal of Sociology*, 66, 1–27.
- Eberhardt, J. L. (2005). Imaging race. *American Psychologist*, 60, 181–190.
- Engeström, Y. (2015). *Learning by expanding* (2nd. ed.). New York, NY: Cambridge University Press.
- Epstein, S. (2007). *Inclusion: The politics of difference in medical research*. Chicago, IL: University of Chicago Press.
- Fine, M., & Weis, L. (2003). *Silenced voices and extraordinary conversations: Re-imagining schools*. New York, NY: Teachers College Press.
- Fleischer, D. Z., & Zames, F. (2012). *The disability rights movement: From charity to confrontation*. Philadelphia, PA: Temple University Press.
- Franklin, B. M. (1994). *From backwardness to “at-risk”*. Albany: State University of New York Press.
- Fuchs, D., & Fuchs, L. S. (1994). Inclusive schools movement and the radicalization of special education reform. *Exceptional Children*, 60, 294–309.
- Gieryn, T. F. (1983). Boundary-work and the demarcation of science from non-science: Strains and interests in professional ideologies of scientists. *American Sociological Review*, 48, 781–795.
- Gieryn, T. F. (1995). Boundaries of science. In S. Jasanoff, G. E. Markle, J. C. Peterson, & T. Pinch (Eds.), *Handbook of science and technology studies* (pp. 393–443). Cambridge: MIT Press.
- Gillborn, D. (2016). Softly, softly: Genetics, intelligence and the hidden racism of the new geneism. *Journal of Education Policy*. Advance online publication. doi:10.1080/02680939.2016.1139189
- Gilmore, R. W. (2002). Fatal couplings of power and difference: Notes on racism and geography. *The Professional Geographer*, 54(1), 15–24.
- Gliedman, J., & Roth, W. (1980). *The unexpected minority: Handicapped children in America*. New York, NY: Harcourt Brace Jovanovich.
- Goff, P. A., Eberhardt, J. L., Williams, M. J., & Jackson, M. C. (2008). Not yet human: Implicit knowledge, historical dehumanization, and contemporary consequences. *Journal of Personality and Social Psychology*, 94, 292–306.

- Goldstein, D. (2014). *The teacher wars: A history of America's most embattled profession*. New York, NY: Knopf Doubleday.
- Goodwin, C. (1994). Professional vision. *American Anthropologist*, *96*, 606–633.
- Gould, S. J. (1996). *The mismeasure of man*. New York, NY: W. W. Norton.
- Graebner, W. (1977). Federalism in the Progressive Era: A structural interpretation of reform. *Journal of American History*, *64*, 331–357.
- Graebner, W. (1980). *A history of retirement*. New Haven, CT: Yale University Press.
- Graham, S. (1992). “Most of the subjects were White and middle class”: Trends in published research on African Americans in selected APA journals, 1970–1989. *American Psychologist*, *47*, 629–639. doi:10.1037/0003-066X.47.5.629
- Green, S., Davis, C., Karshmer, E., Marsh, P., & Straight, B. (2005). Living stigma: The impact of labeling, stereotyping, separation, status loss, and discrimination in the lives of individuals with disabilities and their families. *Sociological Inquiry*, *75*, 197–215.
- Greenbaum, S. D. (2015). *Blaming the poor: The long shadow of the Moynihan Report on cruel images about poverty*. New Brunswick, NJ: Rutgers University Press.
- Grossberg, M. (2011). Liberation and caretaking: Fighting over children’s rights in postwar America. In P. S. Fass & M. Grossberg (Eds.), *Reinventing childhood after World War II* (pp. 19–37). Philadelphia, PA: University of Pennsylvania Press.
- Hacking, I. (1999). *The social construction of what?* Cambridge, MA: Harvard University Press.
- Hallahan, D. P., Pullen, P. C., & Ward, D. (2013). A brief history of the field of learning disabilities. In H. L. Swanson, K. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (pp. 15–32). New York, NY: Guilford Press.
- Harry, B., & Klingner, J. K. (2014). *Why are so many minority students in special education?* New York, NY: Teachers College Press.
- Harvey, D. (2012). *Rebel cities: From the right to the city to the urban revolution*. London, England: Verso.
- Heller, K. A., Holtzman, W. H., & Messick, S. (Eds.). (1982). *Placing children in special education: A strategy for equity*. Washington, DC: National Academy Press.
- Hendrick, I. G., & MacMillan, D. L. (1989). Selecting children for special education in New York City: William Maxwell, Elizabeth Farrell, and the development of ungraded classes, 1900–1920. *Journal of Special Education*, *22*, 395–417.
- Hess, F. M. (2015). *The cage-busting teacher*. Cambridge, MA: Harvard Education Press.
- Johanningmeier, E. V., & Richardson, T. R. (2008). *Educational research, the national agenda, and educational reform: A history*. Chapel Hill, NC: Information Age.
- Jonçich, G. M. (1968). *The sane positivist: A biography of Edward L. Thorndike*. Middleton, CT: Wesleyan University Press.
- Jones, C. P. (2001). “Race,” racism, and the practice of epidemiology. *American Journal of Epidemiology*, *154*, 299–304.
- Jordan, W. D. (1968). *White over Black: American attitudes towards the Negro, 1550–1812*. Chapel Hill: University of North Carolina Press.
- Katz, M. B. (1996). *In the shadow of the poorhouse: A social history of welfare in America*. New York, NY: Basic Books.
- Katznelson, I., & Weir, M. (1985). *Schooling for all: Class, race, and the decline of the democratic ideal*. Berkeley: University of California Press.
- Labaree, D. F. (1988). *The making of an American high school: The credentials market and the Central High School of Philadelphia, 1838–1939*. New Haven, CT: Yale University Press.
- Ladson-Billings, G. (2004). Landing on the wrong note: The price we paid for Brown. *Educational Researcher*, *33*(7), 3–13.
- Latour, B. (1999). *Pandora's hope*. Cambridge, MA: Harvard University Press.
- Lefebvre, H. (1988). Toward a leftist cultural politics: Remarks occasioned by the centenary of Marx’s death. In C. Nelson & L. Grossberg (Eds.), *Marxism and the interpretation of culture* (pp. 75–88). Urbana: University of Illinois Press.



- Lewis, D. (1973). Anthropology and colonialism. *Current Anthropology*, 14, 581–602.
- Logue, L. M., & Blanck, P. (2010). *Race, ethnicity, and disability: Veterans and benefits in post-Civil War America*. New York, NY: Cambridge University Press.
- Longmore, P. K., & Goldberger, D. (2000). The league of the physically handicapped and the great depression: A case study in the new disability history. *Journal of American History*, 87, 888–922.
- Lyon, G. R. (1996). Learning disabilities. *Future of Children*, 6(1), 54–76.
- Martin, E. W., Martin, R., & Terman, D. L. (1996). The legislative and litigation history of special education. *Future of Children*, 6, 25–39.
- Mazzeo, C. (2001). Frameworks of state: Assessment policy in historical perspective. *Teachers College Record*, 103, 367–397.
- McDermott, R. (2010). The passions of learning in tight circumstances: Toward a political economy of the mind. *National Society for the Study of Education*, 109, 144–159.
- McLoyd, V. C., & Randolph, S. M. (1985). Secular trends in the study of Afro-American children: A review of “child development,” 1936–1980. *Monographs of the Society for Research in Child Development*, 50, 78–92.
- Menchaca, M. (1997). Early racist discourses: Roots of deficit thinking. In R. Valencia (Ed.), *The evolution of deficit thinking: Educational thought and practice* (pp. 13–41). London, England: RoutledgeFarmer.
- Mercer, J. R. (1973). *Labeling the mentally retarded*. Berkeley: University of California Press.
- Mills, C. W. (1997). *The racial contract*. Ithaca, NY: Cornell University Press.
- Molina, N. (2006). Medicalizing the Mexican: Immigration, race, and disability in the early twentieth-century United States. *Radical History Review*, 2006(94), 22–37.
- Morawaska, E. (2003). *For bread with butter: The life-worlds of East Central Europeans in Johnstown, Pennsylvania, 1890–1940*. Cambridge, England: Cambridge University Press.
- Morning, A. (2014). And you thought we had moved beyond all that: Biological race returns to the social sciences. *Ethnic and Racial Studies*, 37, 1676–1685.
- Ng, J. C., & Rury, J. (2006, July 18). Poverty and education: A critical analysis of the Ruby Payne phenomenon. *Teachers College Record*. Retrieved from <http://www.tcrecord.org/library/Abstract.asp?ContentId=12596>
- Nichols, S., & Berliner, D. (2007). *Collateral damage. How high-stakes testing corrupts America's schools*. Cambridge, MA: Harvard Education Press.
- Nieto, S. (2003). Puerto Rican students in U.S. schools: A troubled past and the search for a hopeful future. In J. A. Banks & C. A. McGee Banks (Eds.), *Handbook of research on multicultural education* (pp. 515–541). San Francisco, CA: Jossey-Bass.
- Okonofua, J. A., & Eberhardt, J. L. (2015). Two strikes: Race and the disciplining of young students. *Psychological Science*, 26, 617–624.
- Olneck, M. R. (1989). Americanization and the education of immigrants, 1900–1925: An analysis of symbolic action. *American Journal of Education*, 97, 398–423.
- Pelka, F. (2012). *What we have done: An oral history of the disability rights movement*. Amherst: University of Massachusetts Press.
- Pfeiffer, D. (1993). Overview of the disability movement: History, legislative record, and political implications. *Policy Studies Journal*, 21, 724–734.
- Ponterotto, J. G. (1988). Racial/ethnic minority research in the *Journal of Counseling Psychology*: A content analysis and methodological critique. *Journal of Counseling Psychology*, 35, 410–418.
- Popkewitz, T. S. (1997). A changing terrain of knowledge and power: A social epistemology of educational research. *Educational Researcher*, 26(9), 18–29.
- Powell, J. J. W. (2011). *Barriers to inclusion: Special education in the United States and Germany*. Boulder, CO: Paradigm.
- Provasnik, S. (2006). Judicial activism and the origins of parental choice: The court's role in the institutionalization of compulsory education in the United States, 1891–1925. *History of Education Quarterly*, 46, 311–347.

- Reese, W. J. (2013). *Testing wars in the public schools*. Cambridge, MA: Harvard University Press.
- Reschly, D. J., & Hosp, J. L. (2004). State SLD identification policies and practices. *Learning Disability Quarterly, 27*, 197–213.
- Richardson, J. G. (2000). The variable construction of educational risk. In M. T. Hallinan (Ed.), *Handbook of the sociology of education* (pp. 307–323). New York, NY: Springer.
- Richardson, J. G., & Parker, T. L. (1993). The institutional genesis of special education: The American case. *American Journal of Education, 101*, 359–392.
- Robert F. Kennedy Memorial & Southern Regional Council. (1973). *The student pushout: Victim of continued resistance to desegregation*. Atlanta, GA: Author.
- Rogoff, B. (2003). *The cultural nature of human development*. Oxford, England: Oxford University Press.
- Ross, D. (1991). *The origins of American social science*. New York, NY: Cambridge University Press.
- Sampson, R. J., & Winter, A. S. (2016). The racial ecology of lead poisoning: Toxic inequality in Chicago neighborhoods, 1995–2013. *Du Bois Review, 13*, 261–283. doi:10.1017/S1742058X16000151
- Scheid, T. L., & Suchman, M. C. (2001). Ritual conformity to the Americans With Disabilities Act: Coercive and normative isomorphism. In S. W. Hartwell & R. K. Schutt (Eds.), *The organizational response to social problems* (pp. 105–140). Bradford, England: Emerald Group.
- Schweik, S. M. (2009). *The ugly laws: Disability in public*. New York: New York University Press.
- Scotch, R. K. (1989). Politics and policy in the history of the disability rights movement. *Milbank Quarterly, 67*(Suppl. 3), 380–400.
- Scott, J. C. (1998). *Seeing like a state: How certain schemes to improve the human condition have failed*. New Haven, CT: Yale University Press.
- Shapiro, J. P. (1994). *No pity: People with disabilities forging a new civil rights movement*. New York, NY: Three Rivers Press.
- Shifrer, D., Muller, C., & Callahan, R. (2010). Disproportionality: A sociological perspective of the identification by schools of students with learning disabilities. *Research in Social Science and Disability, 5*, 279–308.
- Shircliffe, B. J. (2006). *The best of that world: Historically black high schools and the crisis of desegregation in a southern metropolis*. New York, NY: Hampton Press.
- Shore, C., Wright, S., & Però, D. (Eds.). (2011). *Policy worlds: Anthropology and the analysis of contemporary power*. New York, NY: Berghahn Books.
- Siddle-Walker, V. (1996). *Their highest potential*. Chapel Hill: University of North Carolina Press.
- Sigmon, S. B. (1987). *Radical analysis of special education: Focus on historical development and learning disabilities*. New York, NY: Routledge.
- Skiba, R. J., Chung, C. G., Trachok, M., Baker, T. L., Sheya, A., & Hughes, R. L. (2014). Parsing disciplinary disproportionality. *American Educational Research Journal, 51*, 640–670.
- Skiba, R. J., Poloni-Staudinger, L., Simmons, A. B., Feggins-Azziz, L. R., & Chung, C. G. (2005). Unproven links: Can poverty explain ethnic disproportionality in special education? *Journal of Special Education, 39*(3), 130–144.
- Skiba, R. J., Simmons, A. B., Ritter, S., Gibb, A. C., Rausch, M. K., Cuadrado, J., & Chung, C. G. (2008). Achieving equity in special education: History, status, and current challenges. *Exceptional Children, 74*, 264–288.
- Skocpol, T. (1992). *Protecting soldiers and mothers: The political origins of social policy in the United States*. Cambridge, MA: Harvard University Press.

- Skowronek, S. (1982). *Building a new American state: The expansion of national administrative capacities, 1877–1920*. New York, NY: Cambridge University Press.
- Sleeter, C. E. (1986). Learning disabilities: The social construction of a special education category. *Exceptional Children*, 53(1), 46–54.
- Soja, E. W. (2010). *Seeking spatial justice*. Minneapolis: University of Minnesota Press.
- Star, S. L., & Griesemer, J. R. (1989). Institutional ecology, “translations” and boundary objects: Amateurs and professionals in Berkeley’s Museum of Vertebrate Zoology, 1907–39. *Social Studies of Science*, 19, 387–420.
- Star, S. L., & Ruhleder, K. (1996). Steps toward an ecology of infrastructure: Design and access for large information spaces. *Information Systems Research*, 7, 111–134.
- Swanson, H. L., Harris, K. R., & Graham, S. (2013). Overview of foundations, causes, instruction, and methodology in the field of learning disabilities. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (pp. 3–14). New York, NY: Guilford Press.
- Tate, W. F. (1997). Critical race theory and education: History, theory, and implications. *Review of Research in Education*, 22, 195–247.
- Tate, W. F. (2008). “Geography of opportunity”: Poverty, place, and educational outcomes. *Educational Researcher*, 37, 397–411.
- Timmermans, S. (2015). Introduction: Working with Leigh Star. In G. C. Bowker, S. Timmermans, A. E. Clarke, & E. Balka (Eds.), *Boundary objects and beyond: Working with Leigh Star* (pp. 1–9). Cambridge: MIT Press.
- Trent, J. W., Jr. (1994). *Inventing the feeble mind: A history of mental retardation in the United States*. Berkeley: University of California Press.
- Trent, S., Driver, M., Rodriguez, D., Oh, K., Stewart, S., Kea, C., . . . Hull, M. (2014). Beyond Brown: Empirical research on culturally and linguistically diverse learners with or at-risk for specific learning disabilities from 1994 to 2012. *Multiple Voices for Ethnically Diverse Exceptional Learners*, 14(2), 12–29.
- Tropea, J. L. (1987). Bureaucratic order and special children: Urban schools, 1950s–1960s. *History of Education Quarterly*, 27, 339–361.
- Tyack, D. (1968). The perils of pluralism: The background of the Pierce case. *American Historical Review*, 74, 74–98.
- Tyack, D. (1974). *The one best system*. Cambridge, MA: Harvard University Press.
- Tyack, D., & Hansot, E. (1982). *Managers of virtue: Public school leadership in America, 1820–1980*. New York, NY: Basic Books.
- Ureta, S. (2014). Policy assemblages: Proposing an alternative conceptual framework to study public action. *Policy Studies*, 35, 303–318.
- U.S. Department of Education. (2015). *The 37th annual report to Congress on the implementation of the Individuals With Disabilities Education Act*. Washington, DC: Author.
- Vasquez, E., III, Lopez, A., Straub, C., Powell, S., McKinney, T., Walker, Z., . . . Bedesem, P. L. (2011). Empirical research on ethnic minority students: 1995–2009. *Learning Disabilities Research and Practice*, 26(2), 84–93.
- Valli, L., & Buese, D. (2007). The changing roles of teachers in an era of high-stakes accountability. *American Educational Research Journal*, 44, 519–558.
- Veysey, L. R. (1965). *The emergence of the American university*. Chicago, IL: University of Chicago Press.
- Waitoller, F. R., Artiles, A. J., & Cheney, D. A. (2010). The miner’s canary: A review of overrepresentation research and explanations. *Journal of Special Education*, 44, 29–49.
- Weatherley, R., & Lipsky, M. (1977). Street-level bureaucrats and institutional innovation: Implementing special-education reform. *Harvard Educational Review*, 47, 171–197.
- Williams, M. J., & Eberhardt, J. L. (2008). Biological conceptions of race and the motivation to cross racial boundaries. *Journal of Personality and Social Psychology*, 94, 1033–1047.

- Winzer, M. A. (1993). *The history of special education: From isolation to integration*. Washington, DC: Gallaudet University Press.
- Woolgar, S., & Lezaun, J. (2013). The wrong bin bag: A turn to ontology in science and technology studies? *Social Studies of Science, 43*, 321–340.
- Yell, M. L., & Drasgow, E. (2000). Litigating a free appropriate public education: The Lovaas hearings and cases. *Journal of Special Education, 33*, 205–214.
- Zehler, A. M., Fleischman, H. L., Hopstock, P. J., Stephenson, T. G., Pendzick, M. L., & Sapru, S. (2003). *Descriptive study of services to LEP students and LEP students with disabilities. Volume I: Research report*. Arlington, VA: Development Associates, Inc.
- Zelizer, V. A. R. (1985). *Pricing the priceless child: The changing social value of children*. Princeton, NJ: Princeton University Press.