Taming the duality of disability. Critical cultural-historical tools to disrupt equity paradoxes

Mitigando la dualidad de la discapacidad. Herramientas histórico-culturales críticas para desestabilizar paradojas de equidad

Alfredo J. ARTILES. Director of the Center for Comparative Studies in Race & Ethnicity, Stanford University *(aartiles@stanford.edu)*.

Abstract:

I build the core argument of this article on the premise that disability has a dual nature: it affords protections to people with disabilities while it can also be used as an artifact of marginalization; thus, creating justice paradoxes. For instance, disability's potential to oppress tends to target already marginalized groups, such as racialized people and students from nondominant linguistic, socioeconomic or ethnic backgrounds. Thus, a concept available to safeguard vulnerable groups (i.e., disability) can be deployed to segregate or deny educational opportunities. The purpose of this article is to offer theoretical tools to dissect disability's potential for harm and inspire alternatives to address equity paradoxes that may emerge from this phenomenon. I focus on racial disparities in disability identification as a case in point to contextualize the presentation of theoretical tools. First, I contextualize my analysis with an overview of racial disparities in disability identification. Next, I outline three theoretical tools to advance a critical cultural-historical framework: (1) trace the fluidity of disability, (2) expose the color of knowledge and its implications, and (3) make visible the role of ideologies through a DefectCraft lens. I close with reflections for the next generation of scholarship.

Keywords: disability, intersectionality, difference.

Resumen:

Desarrollo el argumento central de este artículo sobre la premisa de que la discapacidad tiene una naturaleza dual: ofrece protección a las personas con discapacidades, pero también puede utilizarse como un artefacto de marginación y, por tanto, crear paradojas de justicia. Por ejemplo, el potencial de la discapacidad para oprimir tiende a dirigirse a grupos ya marginados, como las personas racializadas y los alumnos de entornos lingüísticos, socioeconómicos o étnicos no dominantes. De este modo, un concepto disponible para

proteger a grupos vulnerables (por ejemplo, la discapacidad) puede aplicarse para segregar o negar oportunidades educativas. El propósito de este artículo es ofrecer herramientas teóricas para diseccionar el potencial dañino de la discapacidad e inspirar alternativas para abordar las paradojas de equidad que pueden emerger de este fenómeno. Me centro en las disparidades raciales en la identificación de discapacidades como un ejemplo concreto para contextualizar la presentación de las herramientas teóricas. En primer lugar, contextualizo mi análisis con una descripción general de las disparidades raciales en la identificación de discapacidades. A continuación, defino tres herramientas teóricas para desarrollar un enfoque histórico-cultural crítico: (1) explorar la fluidez de la discapacidad, (2) exponer el color del conocimiento y sus implicaciones y (3) visibilizar el papel de las ideologías mediante una lente de *DefectCraft*. Termino con varias reflexiones para la próxima generación de investigaciones.

Palabras clave: discapacidad, interseccionalidad, diferencia.

---

1. Introduction

Disability has been present throughout the history of humanity (Stiker, 2009). It is interesting that despite the ubiquity and vulnerabilities associated with this condition, responses to disability across societies and communities have been ambiguous. That is, disability often becomes an object of protection that triggers responses such as legal protections and access to resources. At the same time, however, it has been used as a tool of oppression; e.g., to segregate and limit educational opportunities. As disability historian Baynton (2001) explained, "the concept of disability has been used to justify discrimination against other groups by attributing disability to them" (p. 33, emphasis in original). I have described this ambiguity as the dual nature of disability (Artiles, 2011).

Disability's duality is at the center of various forms of educational inequities that have persisted for generations. For instance, racial, ethnic or linguistic disparities in disability identification rates have been documented in the U.S.A. since at least the 1960s. These disparities, in turn, forge equity paradoxes in which the protective facet of disability (i.e., access to services and interventions) can create inequities for other groups (e.g., racial, ethnic, or linguistic groups) (Artiles, 2003). For instance, researchers have documented how minoritized students can be placed in more segregated programs than their white peers with the same diagnosis (Skiba et al., 2008). Disability identification patterns have also been associated with differential access to services across racial groups (Artiles et al., 2016). Other factors also shape the stratifying power of disability identification. English learners, for example, have a greater likelihood of disability diagnosis than English proficient peers in low-poverty schools (Artiles et al., 2005).

I should note paradoxes of equity stemming from societal responses to disability are also found in the literature on inclusive education. For instance, inclusive education systems in certain European societies may be used as a mechanism for segregation (Artiles et al., 2011) or legitimize the othering of certain groups; see for example studies conducted in Spain (García-Sánchez, 2016; Harry et al., 2008). In the Global South, inclusive education has spread rapidly from Western nations. Indeed, the adoption of inclusive education policies in the Global South can be regarded as a sign of progress. However, an emerging literature suggests we must deploy a cultural historical perspective to understand whether these processes of knowledge transfer are truly enhancing educational opportunity (Artiles et al., in press). Evidence from Global South nations offer cautionary notes and remind us that inequities can be reified in the name of inclusive education (Kalyanpur, 2020; Singal & Muthukrishna, 2014).

To summarize, disability encapsulates a duality that protects and marginalizes vulnerable groups. This duality creates justice paradoxes that educational leaders, policymakers and researchers must anticipate and address across geographical regions. The purpose of this article is to offer theoretical tools to dissect and (re)frame disability's duality and inspire alternatives to address equity paradoxes that may emerge from this phenomenon. I focus on racial disparities in disability identification as a case in point to contextualize the theoretical framing and discussion of tools. I invite readers to consider adjusting and applying this analytical lens to other markers of difference (beyond race) and permutations of educational inequalities (different from identification disparities). My expectation is that these contributions will offer productive options to engage with this multidimensional phenomenon and transcend polarized and color-neutral views that only perpetuate unjust conditions (Skiba et al., 2016). Next, I present an overview of the wicked problem of racial disparities, followed by a discussion of three theoretical contributions to frame and address this problem.

2. Setting the context: Racial disparities in disability identification

Racial disparities in disability rates have been debated in the U.S. for over half a century. These disparities are observed in the categories described as *subjective* due to the role of clinical judgment involved in diagnosis. These categories include specific learning disabilities (SLD), emotional disorders (ED), and mild intellectual disabilities (ID). African Americans and Native Americans are the most affected groups at the national level. Nevertheless, alternative patterns of over- and under-representation are observed at different scales of the education system (region, state, city, school district, school). The National Academies of Sciences, Engineering, and Medicine (NASEM) commissioned two consensus panel reports in a two-decade period (Donovan & Cross, 2002; Heller et al., 1982) and confirmed the persistence of this problem. The 1982 panel emphasized identification and offered a thoughtful framing. Specifically, Heller et al. (1982) stipulated that disproportionality

> is a problem (1) if children are invalidly placed in programs for mentally retarded students; (2) if they are unduly exposed to the likelihood of such placement by virtue of having received poor-quality regular instruction; or (3) if the quality and academic relevance of the special instruction programs block students' educational progress, including decreasing the likelihood of their return to the regular classroom. (p. 18)

Explanations of the problem cover a range, though two stand out. One stresses racial biases driven by historical deficit views of these groups which add stigma to already marginalized groups. In contrast, others assert that racialized learners are overidentified because of disproportionate poverty rates affecting these groups, which in turn inflict developmental threats to these children, ultimately resulting in disabilities. Racial disparities have been described as an equity paradox: the equity response afforded by the Individuals with Disabilities Education Act (IDEA) to protect the rights of learners with disabilities can constitute a new inequity for racialized students, particularly if disability identification results in segregation or differential access to services compared to white peers (Artiles, 2019).

Myriad factors mediate racial disparity patterns such as policy and administrative procedures (including compliance), racial bias, access to quality education and teachers, shortcomings in assessment tools and procedures, socioeconomic barriers at home or communities, structural and cultural-historical factors (Donovan & Cross, 2002; Heller et al., 1982). There is a lack of attention to the role of contextual and structural influences. For instance, the following findings suggest contextual analyses are needed to refine our understanding of this complex problem: identification odds for racial groups vary depending on their representation in the school or district enrollment, the disability category under consideration, or the location of the school (Fish, 2019; Oswald et al., 2002). The role of poverty in the prediction of disability identification depends on the measures used (Cruz & Rodl, 2018) and histories of race relations in the community are associated with school racial disparities (Tefera et al., 2023).

The persistent visibility of this problem led to amendments in IDEA to monitor and correct racial disparities in disability identification and discipline (IDEA, 1997). States submit to the federal government annual reports with rates of identification, placement outside general education classrooms, and discipline patterns by race/ethnicity. Early implementation of these policy requirements made evident the need for additional guidance. Despite subsequent policy refinements, questions and concerns have been raised in the intervening years (Albrecht et al., 2012; Cavendish et al., 2014). For instance, *significant disproportionality* is not defined in IDEA. Thus, there is variability in how states make this determination. This means there is a range in the thresholds used to mark disproportionality across states. "The latitude afforded to states in defining, monitoring, and addressing disproportionality results in significant variance in terms of what counts as disproportionality and whether it is sufficiently addressed through IDEA" (Tefera et al., 2023, p. 371).

In summary, racial disproportionality is a problem of policy and practice that has affected the U.S. educational system for generations. Technical, historical, cultural, and contextual forces shape the magnitude and longevity of this phenomenon (Artiles, 2019).

3. Critical cultural historical (re)framings

I submit that a critical cultural historical lens is needed to examine and understand the duality of disability and its concomitant equity paradoxes. Attention to the critical helps us catalog the role of power and hierarchies that permeate human affairs. Considering that people with disabilities have been historically marginalized and that the idea of disability has been deployed to discriminate groups in the past, it is imperative to account for a critical dimension when studying racial disparities in disability identification. In addition, framing disability through a cultural lens enables us to situate analyses in the contexts of school local practices and staff's interpretive processes when engaging with the notion of disability. Finally, a historical perspective is required to document how the meanings and uses of disability have changed over time in the settings we analyze. This will help elucidate whether narrow or color neutral framings might mediate current local uses and practices germane to disability. In addition, a historical mindset is necessary to account for the genealogy of disability and its common sense; i.e., how legacies of disability that may empower or oppress this group might be sedimented in local contexts. These assumptions permeate the three theoretical interventions I describe next that can be used to analyze the dual nature of disability and attendant equity paradoxes in the context of racial disparities in special education.

3.1. Of boundary objects: tracing the fluidity of disability

I conceptualize disability as a boundary object given its shifting meanings and uses across contexts. Boundary objects

> have different meanings in different social worlds but their structure is common enough to more than one world to make them recognizable, a means to 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)

In the context of the U.S. special education system, disabilities have standard definitions and identification parameters. At the same time, states create their own administrative guidelines and operationalize definitions. This allows states to coordinate the work of special education systems across school districts and when providing reports to the federal government, though substantial variability is embedded in these systems. This is reflected in the proportions of students with disabilities identified in the nation. Figure 1 shows a substantial range from less than 12% to over 20% of all students identified with disabilities across states. How do we interpret the variability between states like Colorado and Pennsylvania showing substantial differences in disability identification rates? Is it explained by the assessment guidelines or eligibility criteria of each state? The range of diagnostic rates illustrates the nature of disability

as a boundary object that is shaped by local histories, policies, and practices; as Star and Griesemer (1989) explained, a boundary object "does not accurately describe the details of any locality or thing" (p. 410).

We find, therefore, that state definitions and guidelines to identify disabilities at the state level are overlaid with the federal policy definitions and requirements. Additional sources of variability might be infused at the school district level, which may not fit neatly with scientific definitions. The overlaying of alternative views of disability with their attendant procedures and practices across settings as if they have the same meaning is described as "categorical alignment" (Epstein, 2007). In turn, these alignment processes facilitate the coordinating work

Figure 1. Students with disabilities as a share of all public-school students, 2021-2022.
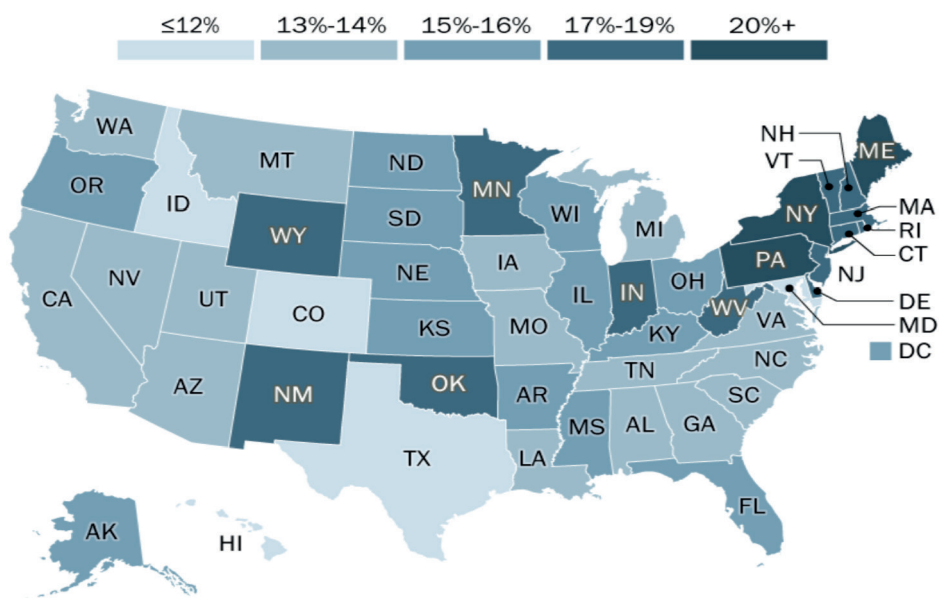
Source: National Center for Education Statistics (as reported by Schaeffer, 2023).

of boundary objects like disability. Categorical alignment smooths out the liminal spaces and opacities among differences in meaning and alternative procedures to monitor or measure the concept of disability; we know categorical alignment has been successful when "it becomes invisible in hindsight" (Epstein, 2007, p. 92). However, categorical alignment is not necessarily a harmonious and coherent process. To illustrate, the definition of SLD that prevailed for many years in the U.S. focused on a significant and unexpected discrepancy between ability and performance levels. Gradually, researchers documented the limits of the discrepancy model and began to examine how students responded to systematic evidence-based interventions and monitoring as a means of identification (Bradley et al., 2002). Nevertheless, evidence suggests school districts continue to struggle to address equity issues in the contexts of these intervention models (Cavendish et al., 2016; Sabnis et al., 2019).

The concepts *boundary object* and *categorical alignment* make visible the multiple interpretive spaces and ambiguities that coexist to coordinate the labor of professionals across organizational contexts (i.e., schools, districts) and preserve the coherence of institutional systems. Needless to say, such systems leak and have equity consequences. Let us return to the problem of racial disparities in disability identification (Donovan & Cross, 2002). Figure 2 presents the proportion of African American students with disabilities relative to their representation in the school population. There is considerable variability in these data though it is clear that Southeastern and some Midwestern states tend to identify a larger proportion of African American learners with disabilities. Beyond questions of diagnostic accuracy, heterogeneities within student groups, and educational opportunities, I argue we should also analyze the shades of disability in these states at the micro (classroom), meso (school, district), and macro (state) levels. In other words, as a boundary object, disability has slightly different meanings and operationalization practices across scales and settings. We should trace how understandings of disability, interpretations of student behaviors, kinds of activities and routines used to index competence at the classroom level align (or not) with the views, interpretations and activities used to diagnose disability at the school and district levels, and how these understandings align (or not) with the state's classificatory framework. In short, we must document the categorical alignment of disability across these spheres of activity to chart potential discoordinations, misinterpretations, and misunderstandings that might mediate schools' and districts' recording and reporting practices.

The analysis of disability identification by race represents a form of "niche standardization" (Epstein, 2007) in which the educational system organizes populations into standardized objects for scientific, administrative, and equity purposes. The standardization normalizes at the group level, thus avoiding universalist and individualist framings (Epstein, 2007). For equity purposes, the education system tracks disabled learners by types (e.g., intellectual,

Figure 2. Percentage of African American students with disabilities by state and state population estimates of African American (ages 6 to 21) school year 2018-19. Evidence for Wisconsin was not included due to questionable data quality.
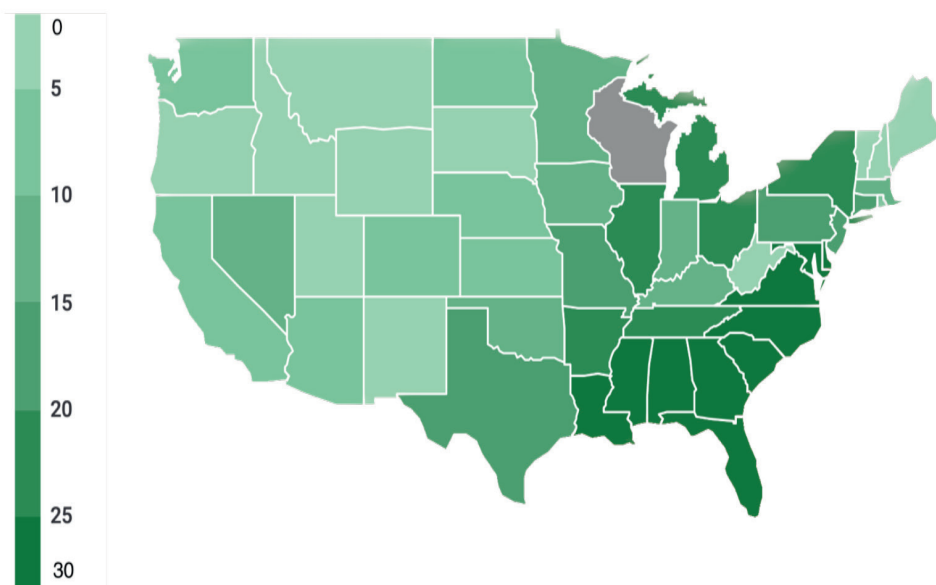

Source: OSEP (2020).

behavioral, learning) to document who has access to services and how they fare. Racial groups are included in this niche standardization to monitor potential inequities in identification rates. Other groups are also monitored (e.g., gender, social class, language). The federal government requires states to report annually school district placement rates to monitor significant racial disproportionality. The implementation of this niche standardization relies on definitions and indicators that are fraught with technical and ideological issues; see Albrecht et al. (2012), Artiles (2011), Cavendish et al. (2014) and USDOE (2023). National data suggest that a relatively low proportion of districts report disproportionality (Government Accountability Office, 2013). However, there have been increases in these statistics (Arundel, 2023). As the data get disaggregated, unique and unsettling patterns are unveiled. Consider, for instance, the data reported in Figure 3 on the percentage of school districts identified with significant disproportionality for six states across a four-year period (2016-2020). This evidence shows rather unique patterns with state D reflecting a stable low proportion of districts (around 10%), while states B and C had about 10-15% of their districts reporting disproportionality in the last year of this period, after having zero disproportionate districts in the preceding three years. State E reported decreasing number of disproportionate districts from about 30% to slightly over 10%. In contrast, State A shows an unusual pattern, first reporting a relatively low percentage of districts (below 10%), but then experiencing a sharp increase in the last year to over 60% of disproportionate districts. Finally, state F shows the opposite pattern, decreasing from a consistently high percentage of disproportionate districts (hovering around 40%) to a sudden drop below 10% in the last year of this period.

Unsettling questions emerge from the review of these data. One crucial issue is embedded in a recent USDOE (2023) report's recommendation: the Office of Special Education programs must

FIGURE 3. Percentage of school districts identified with significant disproportionality for selected states.
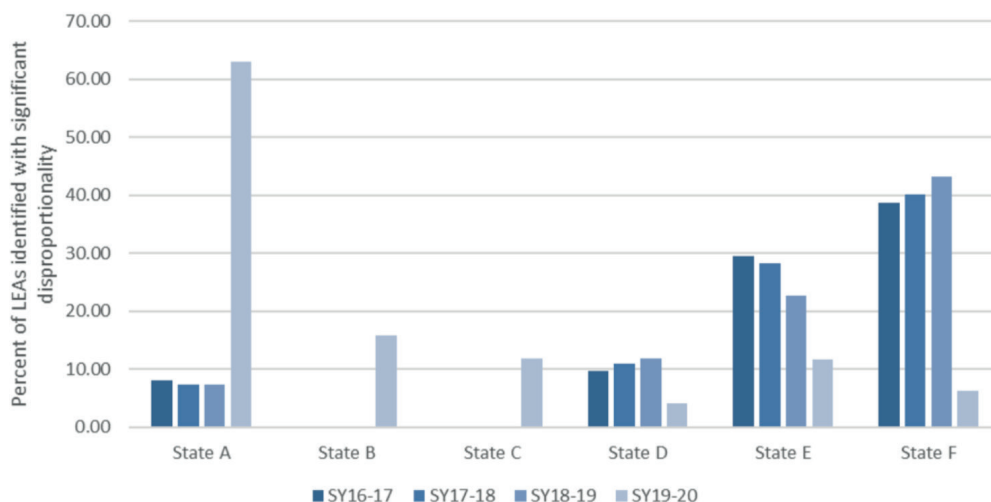
Note: LEAs = local education authorities, SY = school year.
Source: USDOE, 2023.

assess the risks associated with the quality of data reported by [state education agencies] and [school districts] on significant disproportionality, and design and implement control activities as appropriate to mitigate against any identified risks and ensure that reported data are accurate and complete. (p. 2)

I would add to this recommendation conducting contextualized analyses to understand the stable and shifting patterns in the proportions of disproportionate school districts over time. Did some states change the thresholds to index significant disproportionality during this period? What was the variability underlying the categorical alignments of definitions, policies, local theories of ability differences, and practices in these states? Considering that disability is a boundary object and that such objects are "abstracted from all domains and may be fairly vague" (Star & Griesemer, 1989, p. 410), how might disability's laminated meanings and fluid conceptual boundaries as well as local enactments of this notion mediate disproportionality trends over time?

An important implication of this critique is that although the monitoring systems in these states was based on a niche standardization model organized around disability and race, we must rely on situated analyses to illuminate the fluidity of disability along with the contextual histories and cultural practices in schools and districts that surround patterns of disproportionality over time. A potential risk when using the notion of standardization niche is that it implicitly depends on essentialist conceptions of groups; thus, pushing to the background intersectional considerations or attention to group heterogeneities. I return to this point in a subsequent section.

3.2. The color of knowledge and its implications

The second theoretical intervention to advance a critical cultural-historical perspective is to address epistemological barriers in the study of racial inequality in the special education field. I start by acknowledging two facts in contemporary U.S. society. First, ten years ago the student enrollment in U.S. public schools became majority-minority, particularly in the West and South (Maxwell, 2014) and those districts with the most students of color tend to receive significantly less funding (Morgan, 2022). Second, socioeconomic inequality is on the rise. In this vein, Raj Chetty et al. (2016) concluded that

absolute mobility has declined sharply in [the U.S.] over the past half-century primarily because of the growth in inequality. If one wants to revive the "American Dream" of high rates of absolute mobility, one must have an interest in growth that is shared more broadly across the income distribution.

A direct implication of these facts is twofold, namely educational knowledge should be relevant and responsive to the experiences and dreams of students of color, and educational research cannot afford to ignore the ubiquity of inequality in educational contexts and beyond. Unfortunately, careful analyses of research over long periods of time demonstrate the special education research community has not delivered on these obligations (Artiles et al., 1997; Lindo, 2006; Moore & Klingner, 2012; Trent et al., 2014; Vasquez et al., 2011). For example, the National Academies of Sciences reported that intervention research "findings for [students of color] ... are rarely, if ever, disaggregated and compared to majority students with [learning disabilities] or [behavioral disabilities] (Donovan & Cross, 2002, p. 329). The erasure of racial and other differences has also been documented in special education grant funding (Artiles et al., 2016) as well as in other fields such as psychology, public health and medicine (Graham, 1992; Krieger et al., 2021; Syed et al., 2018). For instance, in a paper that attracted significant attention, Steve Roberts et al. (2020) reviewed over 26 000 studies in top psychology journals published between 1974 and 2018. They reported:

First, across the past five decades, psychological publications that highlight race have been rare, and although they have increased in developmental and social psychology, they have remained virtually nonexistent in cognitive psychology. Second, most publications

have been edited by White editors, under which there have been significantly fewer publications that highlight race. Third, many of the publications that highlight race have been written by White authors who employed significantly fewer participants of color (p. 1295).

The implications of these epistemological practices are troubling for special education and allied disciplines as it means that curriculum, pedagogy, assessment, academic interventions and other intellectual resources in special education are grounded in a mythical universal learner that privilege White students. Again, at a time when schools are increasingly heterogenous and inequality is on the rise, we should not risk sustaining this status quo. This is particularly urgent in areas like intellectual, learning and emotional disabilities where contentious policy, technical and practice debates have ensued for decades around race, racism, and bias (Artiles et al., 2016). Stated differently, the study of racial disparities in disability identification must interrogate the knowledge base that informs the practices and policies of this field and increasingly pressure the research community to change epistemological practices including sampling and analytic procedures. Equally significant, the field must broaden its theoretical toolkit to benefit from interdisciplinary developments taking place in allied fields that frame human development and learning as cultural phenomena and place equity at the center of the research process (Artiles & Trent, 2024). These shifts will undoubtedly leave deep marks in the epistemology of this area of inquiry, starting with a new generation of research questions.

3.3. DefectCraft: The tangle of ideologies in practice

Thus far I have argued that a critical cultural-historical approach to understand the dual nature of disability and its concomitant equity tensions requires framing disability as a fluid notion that must be examined in situated in cultural and historical contexts. A related requirement is to bring a reflexive awareness about the epistemological practices underlying knowledge in this field. There is evidence that the literature on disability has ignored intersections with other markers of difference and has often treated equity (beyond ability differences) as an afterthought (Artiles & Trent, 2024). Researchers ought to bring a critical stance to the knowledge they use in their studies and question its epistemological roots to foreground historical intersectionalities and center equity considerations.

I turn in this section to the role of ideologies [i.e., "meaning in the service of power" (Bonilla-Silva, 2006, p. 25)] in the formation of the dual nature of disability, particularly regarding the use of ability differences as a means of marginalization. I conceptualize the practices and structural dynamics that produce such marginalization with the notion of *DefectCraft*, which draws from an interdisciplinary knowledge base (Artiles, 2003, 2011, 2019; Bal et al., 2018; Fields & Fields, 2012; Harris, 2001; Lamont & Pierson, 2019; Omi & Winant, 2014; Powel & Menendian, 2016; Tefera et al., 2023). We see DefectCraft at work when practices and processes pin deficits to already stigmatized individuals and groups (Artiles, 2011), thus contributing to their othering. This is illustrated in the historical and systematic identification of racialized groups as disabled, particularly in subjective disability categories. Note that DefectCraft does not necessarily stem only from the actions of biased or prejudiced actors. Indeed, DefectCraft crystallizes as the consequence of institutional policies, practices and procedures that are encoded with ideological assumptions about certain individuals and groups as damaged. This contributes to the historical portrayal of communities of color as broken and in need of remedial interventions (Artiles, 2011; Scott, 2007). For instance, a favored argument in DefectCraft work is that disproportionate poverty rates in communities of color explain racial disparities in disability rates. An unsettling implication of this reasoning is that it biologizes race; thus, perpetuating a deficit mindset about learners of color. Of significance, DefectCraft compels its practitioners to regard the deficiencies ascribed to these groups as intrinsic attributes; thus, reproducing ideology-ontology circuits; i.e., repeatedly framing certain groups with deficit views (ideologies) which are assumed to be innate traits of these individuals (Artiles, 2022).

Tracking DefectCraft is a fundamental requirement to understand the role of power, culture and history in the racialization of disability. A core resource of DefectCraft is its reliance on

the ideology of color neutrality to obscure the structural power of race in the formation of differences. Colorblindness also erases the cultural-historical conditions that mediate the experiences of racialized groups in an unequal society (e.g., opportunity gaps, discriminatory labor system, historical health and wealth disparities) (Darity, 2011). This racial ideology relies on frames that filter the interpretation of information (Bonilla-Silva, 2006) to "ignore, deny, or erase the role, meaning, or impact of race in a racially stratified society" (Tefera et al., 2023, p. 400). In this way, DefectCraft preserves the status quo and intensifies the marginalization of groups by resorting to culturalist explanations that justify racial disparities—e.g., socioeconomic deprivation, faulty linguistic socialization, inadequate parenting. Alas, culturalist justifications with racist origins have an age-old lineage in the social sciences (Benjamin, 2017). Moreover, culturalist explanations normalize racial disparities and flatten people's intersectional identities. This leads to a binary logic that oversimplifies researchers' analytic work; e.g., are racial disparities the result of child poverty or racial bias? A complementary analytic strategy upholding the stratifying project of DefectCraft is the privileging of aggregate evidence, thus dismissing the crucial role of local contexts and histories (Tefera et al., 2023).

Next, I outline five assertions that offer guidance for tracing the choreographies of DefectCraft in research and practice.

- **Trace the formation and meaning of differences and their consequences.** Education systems are organized around identity categories of race (or other relevant category that drives the othering of groups) and ability differences. Trace how these categories have evolved over time. Do the category definitions rest on binary thinking (normal/deviant); are social, cultural, historical, economic and political forces considered? What are the meanings ascribed to these categories and what are the equity consequences for students after they receive these designations? Are the categories organized around hierarchies that invoke alternative consequences for educational opportunity? What are the roles of biology and culture when explaining the roots of these differences? Do these explanations vary depending on the group under examination? Is access to opportunities and resources differentially distributed across groups? (Artiles, 2011; Omi & Winant, 2014; Shifrer & Frederick, 2019).

- **Unveil the roles of ideologies in identity constructions.** Ideology is at play when meanings serve to build hierarchies of domination (Bonilla-Silva, 2006). Identify policies, processes, or practices that may marginalize or create inequalities (e.g., identification disparities) for racially or ability different groups. Does deficit thinking underlie explanations of inequalities that represent minoritized groups as intrinsically damaged? Are color-neutral ideologies embedded in policies and practices or in solutions to inequities? (Erevelles & Minear, 2010; Lamont & Pierson, 2019; Powel & Menendian, 2016).

- **Examine intersectionalities and cultural-historical lineages.** This scholarship typically addresses the intersection of disability and race (or other groups relevant to local contexts such as low-income or refugee learners) (Artiles, 2013). Inquire whether monitoring systems or research studies tend to place more emphasis on a single identity (i.e., unitary approach) (Hancock, 2007). For instance, does race predict disability identification? What is the history of disability-race intersections in these contexts? (Baynton, 2005). What are the roles of sociohistorical antecedents in these intersections (e.g., race relations, racialized opportunities)? Professional tools are used to create abstractions of learners such as IQ quotients, metrics of poverty, or language proficiency scores. Many abstractions have been systematically produced to perpetuate deficit portrayals of marginalized groups that erase the contexts where they experience structural inequalities; thus, normalizing historical injustices (Ross, 1990). What abstractions are used to represent groups? How is contextual information used to complement abstractions? (Artiles, 2019).

- **Include spatial analysis.** Attention to space has afforded a deeper understanding of social and cultural processes, including growing societal inequalities (Soja, 2010; Tate, 2008). Racial disparities in disability rates must account for the role of spatial forces (Artiles, 2003). Start by asking how are school spaces set up to create, reproduce or deepen injustices? (Galster & Sharkey, 2017). Previous research suggests school location and racial configurations of settings shape racial disparities (Oswald et al., 2002; Shifrer & Fish, 2020; Skiba et al., 2008). How are deficit intersectional identities associated with particular kinds of spaces (urban, suburban)? (Tefera et al., 2023) Are there marginalizing practices?

- **Map social mechanisms underlying corrective measures.** Social mechanisms play a central role in the production and perpetuation of educational inequities (Tefera et al., 2023). Examples of mechanisms include evaluation (i.e., practices that order students in hierarchies that ultimately reify stratifications that systematically privilege certain groups) and quantification (i.e., the use of quantitative indicators that support or reinforce inequalities) (Lamont & Pierce, 2019). Another social mechanism is legitimization, i.e., predispositions to normalize existing inequalities and, thus, validating biases against people of color (Lamont & Pierce, 2019). Social mechanisms can be mapped through the scrutiny of everyday practices and organizational cultures of schools, particularly in contexts in which educators and leaders work to address the racialization of disabilities and other forms of disparities (Tefera et al., 2023).

4. The road ahead

The starting point for my argument in this paper is that disability has a duality that, contingent upon local circumstances, might afford protections and/or could be used to further marginalize individuals and groups. The challenge to leverage the empowering role of education is to minimize the debilitating power of disability at a time when diversity and inequality are on the rise. I document how disability can marginalize groups through a discussion of racial disparities in disability rates. The literature on this equity problem has been embroiled in technical discussions, mostly about methodological concerns. Notably absent in this body of work are theoretical considerations about the role of historical legacies of discrimination, structural factors, as well as identity markers such as race, poverty or migrant background in the production and perpetuation of this enduring problem. Equally important, this literature has ignored how historical inequalities in society permeate educational contexts and likely mediate the construction of racial disparities in disability rates.

I devoted the bulk of this manuscript to describe three theoretical tools framed through a critical cultural-historical frame that can inform analyses of racial disparities. First, it is necessary to trace the fluid nature of disability (a boundary object) to conduct situated analyses. This will enable researchers to examine disability in its sociocultural and organizational contexts. Second, researchers must bring a critical mindset when using the available knowledge base in research and practice. This is crucial considering the color neutral nature of knowledge in this field and allied disciplines. We should not condone a reliance on colorblind knowledge in a society that is increasingly heterogenous and fraught with inequalities. Finally, I called attention to the role of ideologies in the production of racial disparities using the lens of DefectCraft and the social mechanisms that reproduce this problem.

Ultimately, the research community needs to transcend the traditional focus on static demographic markers to study these educational inequities. Diversifying samples will not be enough. A-cultural and color neutral research perspectives will only water down our understanding of disabilities in unequal worlds of cultural differences. At the heart of this work should be a theory of human development and learning that acknowledge their cultural nature (Gutierrez & Rogoff, 2003). This means future research should aspire to integrate systematically conceptions of *mind*, *culture*, and *equity* in disability research (Ferrell & Artiles

in press). Alternative units of analysis are needed, particularly a situated unit, to obtain a more comprehensive and nuanced understanding of the fluid and ideological dimensions of disability. The next generation of research on the dual nature of disability should transcend the emphasis on documenting inequalities and advance formative interventions that rely on culturally responsive partnerships (Afacan et al., 2021; Mawene et al., 2024).

Author's contributions

Alfredo J. Artiles: Conceptualization; Writing (original draft); Writing (review and editing).

Artificial Intelligence (AI) Policy

The author does not claim to have made use of Artificial Intelligence (AI) in the preparation of their articles.

References

Afacan, K., Bal, A., Artiles, A. J., Cakir, H. I., Ko, D., Mawene, D., & Kim, H. (2021). Inclusive knowledge production at an elementary school through family-school-university partnerships: A formative intervention study. *Learning, Culture, and Social Interaction*, *31A*, 100569. https://doi.org/10.1016/j.lcsi.2021.100569

Albrecht, S. F., Skiba, R. J., Losen, D. J., Chung, C., & Middelberg, L. (2012). Federal policy on disproportionality in special education: Is it moving us forward? *Journal of Disability Policy Studies*, *23*(1), 14-25.

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*(9), 431-445.

Artiles, A. J. (2013). Untangling the racialization of disabilities: An intersectionality critique across disability models. *DuBois Review*, *10*(2), 329-347.

Artiles, A. J. (2019). 14th Annual Brown Lecture in Education Research. Re-envisioning equity research: Disability identification disparities as a case in point. *Educational Researcher*, *48*(6), 325-335.

Artiles, A. J. (2022). Interdisciplinary notes on the dual nature of disability: Disrupting ideology-ontology circuits in racial disparities research. *Literacy Research: Theory, Method, and Practice*, 71(1), 133-152.

Artiles, A. J., & Trent, S. C. (2024). Disability as an afterthought: Probing the invisibility of ability differences in interdisciplinary advances in learning. *Review of Research in Education*, *47*(1), 202-212.

Artiles, A. J, Cavendish, W., Gamboa, D., & Caballeros, M. Z. (in press). Disrupting the cultural historical geographies of inclusion: Notes for (re)framing policy research on inclusive education. In L. Cohen-Vogel, J. Scott, & P. Youngs (Eds.), *AERA Handbook of education policy research* (2nd ed.). American Educational Research Association.

Artiles, A. J., Dorn, S., & Bal, A. (2016). Objects of protection, enduring nodes of difference: Disability intersections with *other* differences, 1916 to 2016. *Review of Research in Education*, *40*(1), 777-820.

Artiles, A. J., Kozleski, E., & Waitoller, F. (Eds.). (2011). *Inclusive education: Examining equity on five continents.* Harvard Education Press.

Artiles, A. J., Rueda, R., Salazar, J., & Higareda, I. (2005). Within-group diversity in minority disproportionate representation: English Language Learners in urban school districts. *Exceptional Children*, *71*(3), 283-300.

Artiles, A. J., Trent, S. C., & Kuan, L. A. (1997). Learning disabilities research on ethnic minority students: An analysis of 22 years of studies published in selected refereed journals. *Learning Disabilities Research & Practice*, *12*(2), 82-91.

Arundel, K. (2023, July 31). Equity in IDEA: Why racial disparities are increasing in special ed programs. *K-12 Dive*. https://www.k12dive.com/news/Schools-examine-racial-disparities-in-special-education/688716/

Bal, A., Afacan, K., & Cakir, H. (2018). Culturally responsive school discipline: Implementing Learning Lab at a high school for systemic transformation. *American Educational Research Journal*, *55*(5), 1007-1050.

Baynton, D. C. (2001). Disability and the justification of inequality in American history. In L. J. Davis (Ed.), *The disability studies reader* (4th ed.) (pp. 17-33). Routledge.

Baynton, D. (2005). Defectives in the land: Disability and American immigration policy, 1882-1924. *Journal of American Ethnic History*, *24*(3), 31-44.

Benjamin, R. (2017). Cultura obscura: Race, power, and *culture talk* in the health sciences. *American Journal of Law & Medicine, 43*(2-3), 225-238.

Bonilla-Silva, E. (2006). *Racism without racists: Color-blind racism and the persistence of racial inequality in the United States*. Rowman & Littlefield.

Bradley, R., Danielson, L., & Hallahan, D. P. (Eds.) (2002). *Identification of learning disabilities: Research to practice*. Erlbaum.

Cavendish, W., Artiles, A. J., & Harry, B. (2014). Tracking inequality: Does policy legitimize the racialization of disability? *Multiple Voices*, *14*(2), 30-40.

Cavendish, W., Harry, B., Menda, A. M., Espinosa, A., & Mahotiere, M. (2016). Implementing response to intervention: Challenges of diversity and system change in a high-stakes environment. *Teachers College Record*, *118*(5), 1-36.

Chetty, R., Grusky, D., Hell, M., Hendren, N., Manduca, R., & Narang, J. (2017). The fading American dream: Trends in absolute income mobility since 1940. *Science*, *356*(6336), 398-406. https://doi.org/10.1126/science.aal4617

Cruz, R. A., & Rodl, J. E. (2018). An integrative synthesis of literature on disproportionality in special education. *Journal of Special Education*, *52*(1), 50-63.

Darity Jr., W. (2011). The new (incorrect) Harvard/Washington consensus on racial inequality. *Du Bois Review: Social Science Research on Race*, *8*(2), 467-495.

Donovan, S., & Cross, C. (2002). *Minority students in special and gifted education*. National Academy Press.

Epstein, S. (2007). *Inclusion: The politics of difference in medical research*. University of Chicago Press.

Erevelles, N., & Minear, A. (2010). Unspeakable offenses: Untangling race and disability in discourses of intersectionality. *Journal of Literary and Cultural Disability Studies, 4,* 127-146.

Ferrell, A., & Artiles, A. J. (in press). Beyond demography: Integrating mind, culture, and equity in LD research. In C. M. Okolo, N. Patton, & L. Cutting (Eds.), *Handbook of learning disabilities* (3rd ed.). Guilford.

Fields, K. E., & Fields, B. J. (2012). *Racecraft: The soul of inequality in American life*. Verso.

Fish, R. E. (2019). Standing out and sorting in: Exploring the role of racial composition in racial disparities in special education. *American Educational Research Journal*, *56*(6), 2573-2608.

Galster, G., & Sharkey, P. (2017). Spatial foundations of inequality: A conceptual model and empirical overview. *Russell Sage Foundation Journal of the Social Sciences*, *3*(2), 1-33.

García-Sánchez, I. M. (2016). Multiculturalism and its discontents: Essentializing ethnic Moroccan and Roma identities in classroom discourse in Spain. In H. S. Alim, J. Rickford, & A. Ball (Eds.), *Raciolinguistics: How language shapes our ideas about race*. Oxford University Press.

Government Accountability Office. (2013). *Individuals with Disabilities Education Act. Standards needed to improve identification of racial and ethnic overrepresentation in special education. Report to the Chairman, Committee on Health, Education, Labor, and Pensions, U.S. Senate*. GAO.

Graham, S. (1992). "Most of the subjects were white and middle class": Trends in published research on African Americans in selected APA journals. *American Psychologist*, *47*(5), 629-639. https://doi.org/10.1037/0003-066X.47.5.629

Gutiérrez, K. D., y Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher*, *32*(5), 19-25.

Hancock, A. M. (2007). When multiplication doesn't equal quick addition: Examining intersectionality as a research paradigm. *Perspectives on Politics*, *5*(1), 63-79.

Harris, C. (2001). Equal treatment and the reproduction of inequality. *Fordham Law Review*, *69*(5), 1753-1783.

Harry, B., Arnaiz, P., Klingner, J., & Sturges, K. (2008). Schooling and the construction of identity among minority students in Spain and the United States. *The Journal of Special Education*, *42*(1), 15-25.

Heller, K. A., Holtzman, W., & Messick, S. (Eds.) (1982). *Placing children in special education: A strategy of equity*. National Academy Press.

Kalyanpur, M. (2020). Disrupting the narrative of universality of inclusive education: The new marginalization of low-income, English language learners in India. *Educational Forum*, *84*(4), 296-308. https://doi.org/10.1080/00131725.2020.1796071

Krieger, N., Boyd, R. W., De Maio, F., & Maybank, A. (2021, April 20). Medicine's privileged gatekeepers: Producing harmful ignorance about racism and health. *Health Affairs*. https://doi.org/10.1377/forefront.20210415.305480

Lamont, M., & Pierson, P. (2019). Inequality generation & persistence as multidimensional processes: An interdisciplinary agenda. *Daedalus*, *148*(3), 5-18. https://doi.org/10.1162/daed_a_01748

Lindo, E. J. (2006). The African American presence in reading intervention experiments. *Remedial and Special Education*, *27*(3), 148-153.

Mawene, D., Bal, A., Bear, A.B., Ko, D., Orie, L., & Mayer-Jochimsen, M. (2024). Creating thirdspace: Indigenous learning lab to transform a school discipline system. *American Educational Research Journal*, *61*(4), 842-878.

Maxwell, L. A. (2014, August 19). U.S. school enrollment hits majority-minority milestone. *Education Week*. https://www.edweek.org/leadership/u-s-school-enrollment-hits-majority-minority-milestone/2014/08

Moore, B. A., & Klingner, J. K. (2012). Considering the needs of English language learner populations: An examination of the population of reading intervention research. *Journal of Learning Disabilities, 47*(5), 391-408.

Morgan, I. (2022). *Equal is not good enough: An analysis of school funding equity across the U.S. and within each state*. The Education Trust.

Omi, M., & Winant, H. (2014). *Racial formation in the United States* (3rd ed.). Routledge.

OSEP (Office of Special Education Programs). (2020). *OSEP fast facts: Black or African American children with disabilities*. Office of Special Education and Rehabilitative

Services. https://sde.idaho.gov/sped/public-reporting/files/osep/OSEP-Fast-Facts-Black-or-African-American-Children-with-Disabilities.pdf

Oswald, D. P., Coutinho, M. J., & Best, A. M. (2002). Community and school predictors of overrepresentation of non-dominant children in special education. In D. J. Losen, & G. Orfield (Eds.), *Racial inequity in special education* (pp. 1-13). Harvard Education Press.

Powel, J. A., & Menendian, S. (2016). The problem of othering: Towards inclusiveness and belonging. *Othering and Belonging: Expanding the Circle of Human Concern*, (1), 14-39.

Roberts, S., Bareket-Shavit, C., Dollins, F. A., Goldie, P. D., & Mortenson, E. (2020). Racial inequality in psychological research: Trends of the past and recommendations for the future. *Perspectives on Psychological Science*, *15*(6) 1295-1309.

Sabnis, S., Castillo, J. M., & Wolgemuth, J. R. (2019). RTI, equity and the return to the status quo: Implications for consultants. *Journal of Educational and Psychological Consultation*, *30*(3), 285-313. https://doi.org/10.1080/10474412.2019.1674152

Schaeffer, K. (2023, July 24). *What federal education data shows about students with disabilities in the U.S.* Pew Research Center. https://www.pewresearch.org/short-reads/2023/07/24/what-federal-education-data-shows-about-students-with-disabilities-in-the-us/

Scott, D. M. (2007). *Contempt & pity: Social policy and the image of the damaged Black psyche, 1889-1996*. University of North Carolina Press.

Shifrer, D., & Fish, R. (2020). A multilevel investigation into contextual reliability in the designation of cognitive health conditions among U.S. children. *Society and Mental Health*, *10*(2), 180-197. https://doi.org/10.1177/2156869319847243

Shifrer, D., & Frederick, A. (2019). Disability at the intersections. *Sociology Compass, 13*(10), e12733. https://doi.org/10.1111/soc4.12733

Singal, N., & Muthukrishna, N. (2014). Education, childhood and disability in countries of the South. Re-positioning the debates. *Childhood*, *21*(3), 293-307.

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*(3), 264-288.

Skiba, R., Artiles, A. J., Kozleski, E. B., Losen, D., & Harry, B. (2016). Risks and consequences of over-simplifying educational inequities: A response to Morgan et al. (2015). *Educational Researcher*, *45*(3), 221-225.

Soja, E. W. (2010). *Seeking spatial justice*. University of Minnesota Press.

Star, S. L., & Griesemer, J. (1989). Institutional ecologies, translations, and coherence: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-1939. *Social Studies of Science*, *19*(3), 387-420.

Stiker, H. J. (2009). *A history of disability*. University of Michigan Press.

Syed, M., Santos, C., Yoo, H. C. B., & Juang, L. P. (2018). Invisibility of racial/ethnic minorities in developmental science: Implications for research and institutional practices. *American Psychologist*, *73(*6), 812-826. https://doi.org/10.1037/amp0000294

Tate IV, W. F. (2008). "Geography of opportunity": Poverty, place, and educational outcomes. *Educational Researcher*, *37*(7), 397-411.

Tefera, A. A., Artiles, A. J., Kramarczuk Voulgarides, C., Aylward, A., & Alvarado, S. (2023). The aftermath of disproportionality citations: Situating disability-race intersections in historical, spatial, and sociocultural contexts. *American Educational Research Journal*, *60*(2), 367-404.

Trent, S. C., Driver, M. K., Rodriguez, D., Oh, K., Stewart, S., Kea, C., & Artiles, A. J. (2014). Beyond Brown: Empirical research on diverse learners with or at-risk for specific learning disabilities from 1994-2012. *Multiple Voices*, *14*(2), 12-29.

USDOE. (2023). *Implementation of the significant disproportionality in the Individuals with Disabilities Education Act final regulations. Final report*. Office of the Inspector General. https://oig.ed.gov/sites/default/files/reports/2023-10/equity-idea-final-inspection-report.pdf

Vasquez III, E., Lopez, A., Straub, C., Powell, S., McKinney, T., Walker, Z., Gonzalez, T., Slocum, T. A., Mason, L., Okeeffe, B. V., & Bedesem, P. L. (2011). Empirical research on ethnic minority students: 1995-2009. *Learning Disabilities Research & Practice*, *26*(2), 84-93. https://doi.org/10.1111/j.1540-5826.2011.00328.x

Author's biography

Alfredo J. Artiles. He is the Lee L. Jacks Professor of Education and Director of the Research Institute at the Center for Comparative Studies in Race & Ethnicity at Stanford University. His scholarship examines equity paradoxes created by educational policies. Dr. Artiles studies how protections afforded by disability status can unwittingly stratify educational opportunities for minoritized groups and is advancing responses to these inequities. He is the editor of the book series Disability, Culture, & Equity (Teachers College Press).

iD https://orcid.org/0000-0001-5772-0787