

The manuscript is scheduled for publication in *Exceptionality*.

This is a preprint copy made available to ensure timely dissemination of the work. The manuscript is pending final edits.

The Telos of Special Education: A Tripartite Approach

Dimitris Anastasiou ^a, Mack D. Burke ^b, Andrew L. Wiley ^c, James M. Kauffman ^d

a Southern Illinois University Carbondale

b Baylor University

c Kent State University

d University of Virginia

Corresponding author: Dimitris Anastasiou, Ph.D., Professor, School of Education,
Mail Code 4624, Southern Illinois University Carbondale, Carbondale, Illinois 62901,
USA; Tel: 618-453-1819. E-mailaddress: anastasiou@siu.edu

Abstract

The purpose of this paper is to define and describe the “Telos” or purpose of special education.

We argue that special education has three main (tripartite) functions: (a) research, (b) a distinct system, and (c) special instruction. The overall Telos of special education is to provide an educational service to better serve students whose disabilities adversely affect their learning.

Despite this overall Telos of special education, we see a more specific Telos for each function. In particular, the Telos of special education research should be based on the search for truth, whereas the Telos of the special education system focuses on promoting equality of opportunity, equity, and social justice. Last, the Telos of special education instruction is to optimize learning through specialized, individualized, and effective instruction, which is essential to achieve the overall Telos of special education. Current challenges to all three parts of special education's telos are discussed.

Keywords: telos, special education, research, system, instruction, truth, social justice

The Telos of Special Education: A Tripartite Approach

Telos (from the Greek τέλος) has multiple meanings: (a) the purpose of a concept or thing, (b) the “end goal” or fulfillment of a concept or thing, and (c) especially in modern Greek, the *death* of a person, idea, system, or human artifact. In this paper, we examine the purpose of special education—what its goals should be—and current trends that may result in its death.

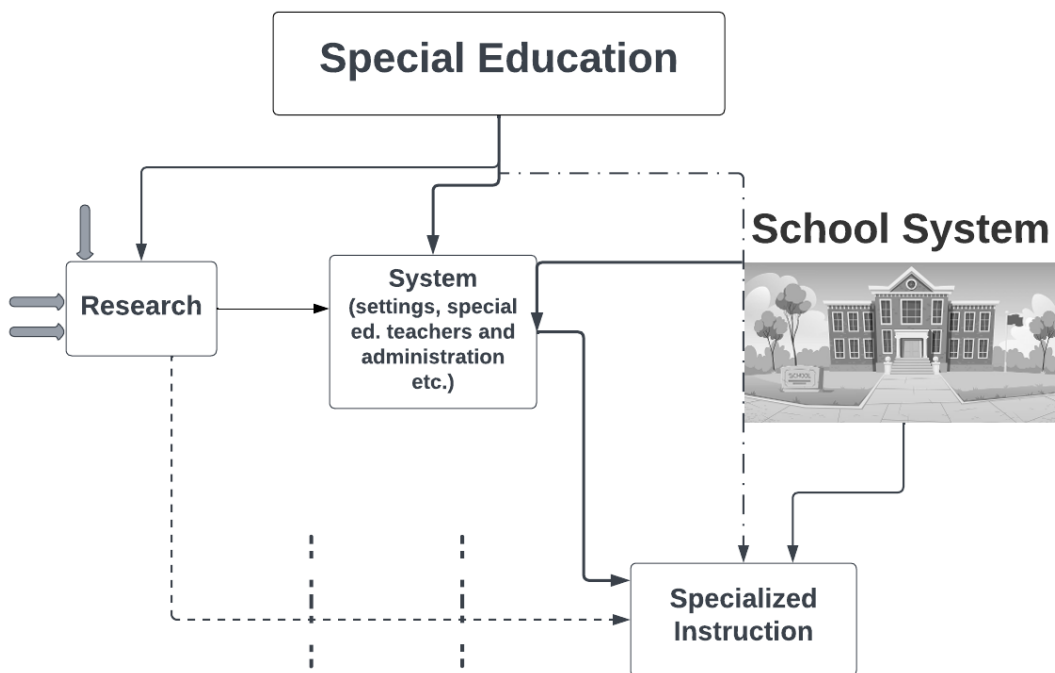
The primary legal and overall purpose of special education is to provide *pecially designed instruction* (SDI) to students with disabilities whose disability adversely affects their learning; an instruction that maximizes their learning and functioning (Anastasiou & Kauffman, 2019; Kauffman & Badar, 2014; U.S. Code [U.S.C.] 20 § 1401 et seq.). SDI focuses on a range of practices for promoting academic, cognitive, social, emotional, and adaptive skills associated with human flourishing, happiness, and quality of life (Pullen, 2022; Pullen & Hallahan, 2015). Under current federal law, special education is mandated for students with disabilities and not meeting its legislative requirements is illegal (Rodriguez & Murawski, 2022; Yell, 2019; Yell & Prince, 2022). These requirements include a free and appropriate education (FAPE), delivered through an individualized education program (IEP) in the least restrictive environment (LRE) selected from a full continuum of alternative placements (CAP) to optimize IEP implementation and outcomes.

Nevertheless, a common widespread misconception is a false equivalence constructed between disability and other types of diversity (Anastasiou, Kauffman, & Michail, 2016). Disability is one of many diversities schools must accommodate. A common error in understanding and achieving the Telos of special education is equating disability with other diversities in schools. Special education is designed for a unique type of diversity that includes a severe learning gap (i.e., a gap between actual and expected achievement). The Telos of special

education focuses on the propositional formula: disability + severe learning gap = need for specialized instruction (Anastasiou & Kauffman, 2019). Special education mainly focuses on this, and only this learning gap. In addition, the federal special education law is clear that the main purpose of special education is *only* SDI and the system and research supporting it.

One way to analyze the Telos of special education is to examine how it currently operates or functions (See Figure 1). We can distinguish between three relatively distinct parts of special education, each with its own Telos: (a) special education as a *field of research*, (b) special education as a distinct *subsystem* within the national educational system, and (c) special education as specialized *instruction* for students with disabilities when their disabilities affect their educational performance (e.g., learning).

Figure 1. A tripartite analysis of special education



Note: The thin, dashed, and interrupted line from research to SDI illustrates how appropriate, effective SDI can be subverted by ideas or practices that have not been validated by rigorous research.

The Individuals with Disabilities Education Act (IDEA) makes clear that the overarching Telos of special education is SDI. The design and delivery of SDI is informed by research across multiple disciplines and theoretical frameworks (e.g., special education, psychology, applied behavior analysis, and legal studies). Providing SDI also requires a well-designed, dedicated special education system (e.g., funding, training, laws, policy, professional agency, specialized settings/equipment when necessary). The system is focused on SDI for students with disabilities, but is also influenced by the broader system of public education in which special education is embedded.

One schematic cannot fully capture the dynamics of special education. Special education is more complex than the three parts depicted in Figure 1. For example, our schematic does not explicitly depict important evolving contextual factors such as public perceptions and beliefs about special education including, for example, preference for unproven practices and policies, or beliefs that special education is unhelpful or harmful to those it is meant to serve, or broader educational policies (e.g., competition among schools).

Examining the Telos of special education requires considering whether special education is, despite its imperfect implementation, a benevolent or malevolent enterprise. How the aims of special education are viewed impacts special education's support system (e.g., recruitment and retention of special educators, adequate support for specialized curricula and settings) and, consequently, the quality and outcomes of SDI itself. If enough stakeholders are persuaded that special education is malevolent (e.g., unfairly discriminatory, harmful, wasteful, an unnecessary system designed to short-change students or funnel them into unhappy and unproductive lives), special education as a subsystem of public education will wither or collapse.

Special education's Telos is threatened by movements that are now worldwide (see Anastasiou et al., 2018, 2020). We turn next to describing these challenges and threats to implementing the three parts of special education's Telos. These challenges are faced not only in the USA but exist in nearly all countries committed to educating students with disabilities.

The Telos of Research in Special Education

Special education has a distinct tradition in education and the social sciences as being informed by empirical research and committed to developing an evidence base for the instructional practices provided to students with disabilities. Since about 1600, the classical view of the goal of scientific research has been the search for original truths in order to increase the knowledge of what is true (Bunge, 2017). The goal of research projects are to find the truth; new truths, including new applied procedures. Related to this goal, the role of technology is to find useful artifacts (Bunge, 2017). Confirmation through empirical evidence has been deemed essential for establishing truth, while empirical refutation indicates falsity (Bunge, 2017).

Some philosophers have embraced extreme forms of cognitive relativism (Kauffman & Sasso, 2006) and promoted a type of social constructionism (Anastasiou & Kauffman, 2013) that challenges the truth-seeking Telos of scientific inquiry in special education. For example, some social constructionists have claimed that scientists make up facts (e.g., biological facts such as hormones, see Latour & Woolgar, 1986) instead of studying them objectively. In general, social constructionists consider scientific facts to be *constructed* out of social interactions and negotiations (see Niiniluoto, 1999). Latour (1988) claims that science is all about power: “[s]cience is not politics. It is politics by other means. But people object that 'science does not reduce to power.' Precisely. It does not reduce to power. It offers other means” (p. 229). In addition, Foucault’s (1980) famous thesis about *regimes of truth* embraces cognitive relativism,

in the sense that truth is relative to social groups, communities, social order, etc. The notion of “regimes of truth” claims that truth and power are inseparable: “The important thing here, I believe, is truth isn’t outside power, or deprived of power” (Foucault, 1980, p. 131). Foucault also stated, “Each society has its *regime of truth*, its 'general politics' of truth” (Foucault, 1980, p. 131; emphasis added). In the strong form of cognitive relativism, truth is “truth for X”, where X can be a person, a social or cultural group, a community, etc. (Niiniluoto, 1999; Psillos, 2007).

Of course, scientific institutions and scientists exist within society and are subject to the influence of political and social forces. Science is a collective human endeavor that requires investment of time and money, and thus it is shaped and guided by the entities in the world that hold control over such resources (Lewontin, 1992). Distinguishing between the influence of social and cultural factors on science and the assertion that *all scientific evidence is socially constructed* is crucial. These two statements are vastly different, because social factors can play a role in determining the scientific research agenda, such as in the case of embryonic stem cell research, and can also establish ethical boundaries for scientific investigation, as seen in the case of Nazi human experimentation. Furthermore, social factors can even impact the content of scientific beliefs, such as in the cases of Lysenkoism, Nazi concepts of Aryan science, eugenics (belief in hereditary IQ and desired characteristics), and misinformation about the origin of AIDS (Anastasiou & Kauffman, 2013). However, it is important to note that *social factors cannot arbitrarily create scientific "facts"* that are divorced from external reality, as Latour and Woolgar (1986) stated and Foucault (1980) implied (Anastasiou & Kauffman, 2013; Bunge, 1999). In addition, scientific conclusions are scrutinized constantly for their truth and falsity by using self-corrective methods integral to the scientific process (e.g., statistical errors, methodological flaws, illogical interpretation; Bunge, 2003; Smith, 2023). Importantly, the self-corrective nature of

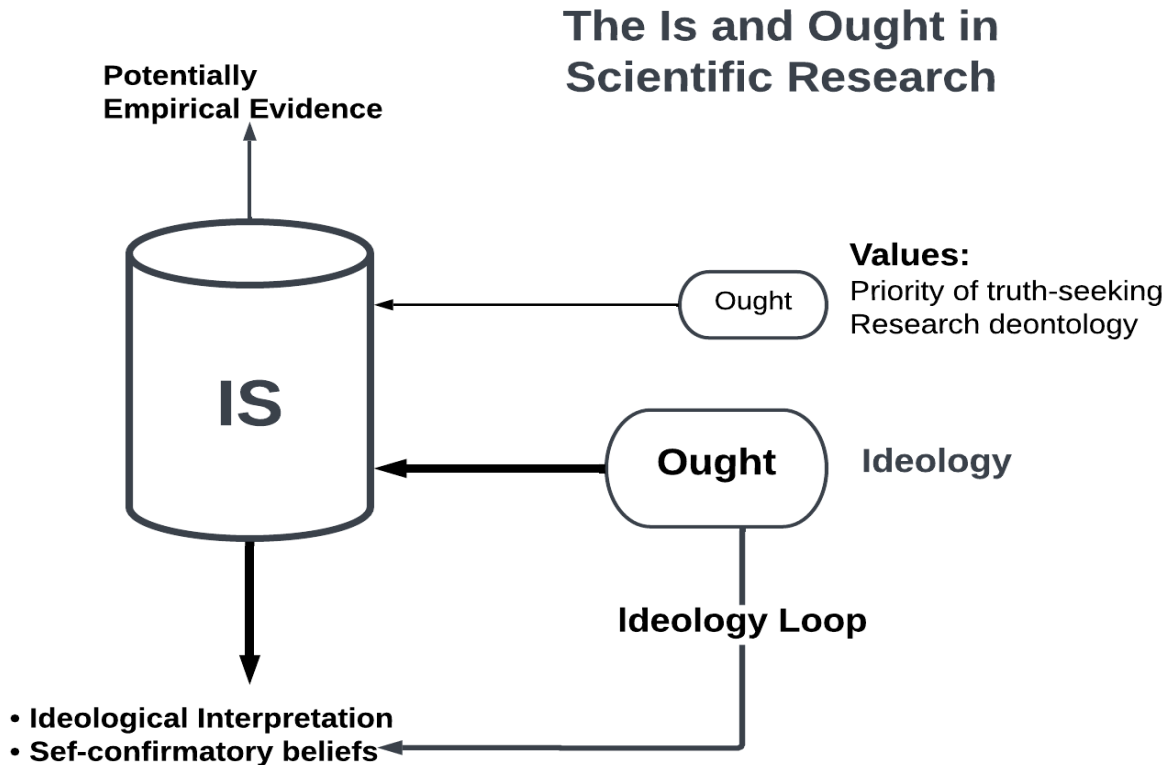
science does not by itself address all problems of bias or the ethical use of scientific findings (Bunge, 2003).

However, these critical distinctions in thinking about science as a human endeavor concern more the descriptive status of science rather than the evaluative status of science. Hume (1740/2009) distinguished between descriptive or positive statements regarding what exists (“is” statements) and prescriptive or normative statements regarding what should exist (“ought” statements). The “is–ought” problem is closely linked to the distinction between facts and values (Putnam, 1981). As Martin Luther King Jr. (1963/2012, p. 4) put it “science deals mainly with facts; religion deals mainly with values.” In social science, this requires the epistemic principle that “[s]ocial facts are objective and can be known, albeit only partially and gradually” (Bunge, 1996, p. 2).

Values may serve as a motivation for conducting research (e.g., selection of a research topic, formulating hypotheses), but the research process itself (e.g., testing hypotheses, results) ought to be value-free (Bunge, 1996). This does not ignore the undeniable reality that humans have explicit and implicit moral, political, and/or religious values (Weber, 1949); quite the opposite. It is said that values and associated ideologies are so pervasive that they can be compared to the air we breathe (Milanovic, 2023). Values can be so deeply held that we consider them self-evident, or we may be unaware of them and how they influence our interpretations of the world (Milanovic, 2023). Regardless, if the Telos of research is to develop new knowledge, then truth-seeking *ought to be* the cardinal (highest) value that guides scientific inquiry (Bunge, 1996). In this sense, truth-seeking is a minimum axiological value that can serve as a guide (Niiniluoto, 1999). The prioritization of truth-seeking does not come at the expense of *research deontology*. Truth-seeking is the cardinal value in research, but it must be balanced with a set of

deontological values to ensure research is ethical (i.e., respects human subjects and environments). The ethics of research must include minimizing harm and equitable treatment.

However, when the concept of what ought to be (or "oughtness") becomes excessively enlarged or hypertrophic, it can give rise to ideology. Ideology, an organized set of values and beliefs, can be involved in research so rigid and dogmatic that it eventually projects a distorted reality (Bunge, 1996). When someone prioritizes ideology, research outcomes cannot refute the original research hypothesis. The very purpose of scientific inquiry, the search for truth, is self-canceling by ideologies (Bunge, 1996). Science is distinguished by its Telos (truth-seeking) from ideology (belief-confirming; Bunge, 1996; McIntyre, 2019). When ideologies determine outcomes, this results in a closed circuit, an *ideology loop* (see Figure 2). This loop produces a narrow and inflexible view of the world that lacks nuance. In extreme cases, this can lead to the adoption of harmful policies or practices based on dogmatical beliefs and at the expense of scientific evidence, such as the Lysenko case in the Soviet Union (Ings, 2016; Levins & Lewontin, 1985). Thus, prioritizing truth-seeking balanced by ethical principles is essential when conducting research. Weber (1949), one of "the fathers of sociology," also emphasized the need for scientific objectivity and argued extensively for avoiding value judgments while studying social phenomena. The priority of the truth-seeking approach is depicted in Figure 2.

Figure 2. Two approaches to conducting research.

The word “truth” designates a set of multiple concepts (Bunge, 2003). The most important relevant concepts here are three: truth-seeking, formal truth, and factual truth. Truth-seeking is not a value-free endeavor (Haack, 2007; Weber, 1949). Truth-seeking is based on the *ontological thesis* that there is an external, mind-independent reality; a mind-independent world means that its structure and content are independent of the epistemic standards that science uses to evaluate theories (Bunge, 1996; Psillos, 1999, 2017). Truth-seeking is also derived from the *epistemic thesis* that reality can be approached through experience, rational reflection on that experience, scientific methods, and scientific self-correction (Bunge, 1996; Psillos, 2007, 2017). Scientists aim to discover and verify truths about the physical and social world and seek to expand our knowledge (Bunge, 1996). The scientific method *per se*, a systematic and empirical

approach to research, is built on the foundation of truth-seeking and knowledge-gaining (Bunge, 1996).

Formal truths pertain to logic and mathematics, whereas factual truths are related to everyday knowledge, scientific facts, and technological discoveries. An instance of a formal truth is "there are infinitely many prime numbers," whereas a factual truth is "at present, there are approximately eight billion people on earth" (Bunge, 2012).

Factual truth is a semantic concept that characterizes the adequacy or fitness of ideas and statements to reality (Bunge, 2003, 2012). Although determining absolute truths in social science is not feasible, determining partial or approximate truths is possible (Bunge, 1974, 1996). Similarly, there is no universal truth condition for a statement with a factual reference (e.g., New York is large), but a truth condition for a statement stipulates the conditions (e.g., a large city is one with a population of a million or more) under which a statement is (fully) true (Bunge, 1974). In factual science, theoretical statements are considered, at best, approximations of the truth. Theories provide frameworks for explaining and predicting phenomena and can be tested, but they are not infallible and can be subject to modification or even rejection in light of new evidence.

Degree of truth is a concept fundamental to scientific inquiry, as it acknowledges the inherent uncertainty and fallibility of our understanding of the natural and social world (Bunge, 1974, 1996). It recognizes that our knowledge of reality is always provisional and that theories are constantly subject to refinement or revision as new data become available (Bunge, 1996). *Approximate truth* is a related concept acknowledging that our theories may not perfectly capture the complexities of reality (Bunge, 1974). Rather, they provide an abstract representation of the phenomena we observe. Despite their limitations, however, these approximations can be

incredibly useful in helping us make predictions, design experiments, and guide our understanding of the natural and social world (Bunge, 1996; Haack, 2007). In other words, truth is further defined as the degree of correspondence of ideas to facts (Bunge, 2012). Questioning the accuracy of a proposition presupposes that there is a truth valuation, there are truth (or falsity) values other than "absolutely true" and "absolutely false" (Bunge, 2012).

In the realm of science and technology, a hypothesis is not evaluated against mere facts, but rather through the examination of empirical data linked to said hypothesis (Bunge, 2003). Truth can be *partial* or approximate; empirical evidence may be incomplete or uncertain, leading to approximate understanding of truth. This is especially the case when we work with complex social systems or phenomena that are difficult to fully understand or model (Bunge, 1996; Haack, 2007). Therefore, research requires the pursuit of truth, as difficult and as painful as that might be in special education.

Challenges to Research

One of the great challenges to the truth-seeking Telos of research is the heavy influence of ideology that threatens to undermine progress in special education research. Specifically, empirical research in special education aims at the search for objective truth, even partial or conditional (Kauffman & Farkas, 2022).

One example of a current challenge to special education's research Telos is the emergence of Dis/ability Critical Race Theory (DisCrit), perhaps the most ideology-driven part of Disability Studies in Education (DSE). DisCrit raises new questions about the relationship between science and ideology in special education. Invoking a set of ideological tenets, DisCrit theorist Annamma and colleagues state that "we recognize that dis/ability has long been associated with deviance and lack of intelligence ... we also believe this ideology is grounded in

hegemonic notions of normalcy” (2013, p. 19). Furthermore, they state “[w]e believe that dis/ability must be primarily understood as a political and social category” (Annamma et al., 2013, p. 19). At the heart of DisCrit theory is the idea that the knowledge produced by empirical science is not to any degree ideology-free or objective but reflects only the biases of the societies in which they exist. From this perspective, applications of empirical science are viewed as no different from phrenology, craniology, or eugenics (Annamma et al., 2013).

Those who reject the truth-seeking Telos of scientific inquiry and are skeptical about the scientific methods in favor of ideological inquiry that eschews the possibility of objective knowledge do so by mischaracterizing all science as scientism (i.e., scientism as ideology) and stereotyping all research on people with disabilities as malevolent based on historical examples. In other words, they use ideology as a cudgel to attack and discredit empirical research in special education (Haack, 2007; McIntyre, 2019).

The third basic tenet of DisCrit theory is that it “emphasizes the social constructions of race and ability and yet recognizes the material and psychological impacts of being labeled as raced or dis/abled, which sets one outside of the western cultural norms” (Annamma et al., 2023, p. 11). A simple observation that disability is found at higher rates of prevalence in non-Western countries and in countries with an overwhelming non-white majority, such as the Sub-Saharan African countries, undermines one of the basic tenets of the DisCrit theorization (Anastasiou & Keller, 2017; World Health Organization, 2011). A fundamental conceptual flaw of DisCrit theory is that the concept of disability is treated in the same way as the concept of “race.” A socially constructed category like race, which has no significant basis in biology, as Annamma et al. (2013, 2022) correctly state, is equated with disabilities that do have partly a basis in biological factors (socialized biology) along with their interaction with societal factors (see

Anastasiou & Kauffman, 2013). In short, DisCrit theorists apply homomorphism to all related elements of the concepts of race and disability (Annamma et al. 2013, 2022).

To clarify, disability is shaped by a combination of biological and societal factors, and the interactions of these factors play a significant role in defining disability (Anastasiou & Kauffman, 2013). Unlike disability, the term “race” is a folk concept or cultural category and does not indicate biological differences (Anastasiou et al., 2016). In no way does this deny the intersection of the sets or categories of disability and race.

By reducing scientific inquiry to a political game, DisCrit theorists arguably undermine both racial and disability justice by blurring distinctions between "good" and "bad" science and any demarcation criteria between “good science” and “pseudoscience.” Criticizing and devaluing empirical research in education as mere ideological is a central strategy of DisCrit yet, ironically, DisCrit theorists make ideology and politics the foundation of the DisCrit framework. Thus, deliberate politicization of inquiry is a prominent characteristic or strategy of the DisCrit framework. For example, Annamma et al. (2013, p. 11) elevate to tenet (tenet #7 in their framework) the position that “DisCrit requires activism and supports all forms of resistance.” However, this position undermines the integrity of the scientific inquiry by contradicting the principle of *disinterestedness* in the sense that scientists should strive to minimize the influence of their personal biases and should work in the interest of advancing truth and knowledge, rather than for their own personal agenda or to exert power (Merton, 1973). In Merton’s (1973, p. 276) words, “[t]he scientist does not stand vis-a-vis a lay clientele in the same fashion as do the physician and lawyer, for example.”

Accordingly, DisCrit theorists reject any basis for judging objectivity or reproducibility, which are at the heart of scientific inquiry (Bunge, 2017). This allows DisCrit theorists to assert

untestable arguments (e.g., coloring special education as racist) or inaccurate claims about the over-representation of minorities in special education placements (e.g., ignoring substantial empirical evidence on disproportionality) (Morgan et al. 2017a, b). Instead, DisCrit advocates impose an *ethos of faith* and self-righteousness, and power-seeking. This intentionally ideological approach undermines the scientific ethos of open-minded inquiry and organized skepticism to guard against false knowledge. Moreover, from a social justice perspective, it undermines the very tools that would help special education distinguish between those practices that are most beneficial versus those that are not beneficial, or even harmful, for example, for black students with disabilities.

Scientists value empirical evidence and are open to modifying their perspectives based on new evidence that emerges (Bunge, 1991; McIntyre, 2019; Merton, 1973). This is what distinguishes science from religious or political fundamentalism. DisCrit's adoption of this new variant of Lysenkoism (the Lysenko case in the Soviet Union; see Ings, 2016; Levins & Lewontin, 1985) undermines not only scientific inquiry but also activism for sustainable social justice. Advocacy in special education is not arbitrary but is guided by the best available research. There is no true social progress without truth. Without a foundation of truth, it becomes difficult for people and movements to make informed decisions, fight injustice, and take meaningful action toward progress. And those who distrust the value of truth and search for objective truth (even partial or conditional) in social sciences might hesitate to acknowledge falsehood (Neiman, 2023). Despite its seemingly progressive rhetoric, like Lysenkoism, DisCrit is, in fact, regressive.

Should we Defend Scientific Inquiry in Special Education?

Despite withering assaults, special education research remains a strength of the field. Historically, empirical truth-seeking has been a core part of special education. In current discussions of evidence-based practice, empirical truth-seeking focuses on determining (a) what works? (b) for whom? (c) under what conditions? and (d) to achieve what outcomes? But there are also these questions: Is it worth investing time and effort in defending science within special education and related fields? Is a positive research program on evidence-based practices within an open science framework sufficient to promote progress in special education?

First, science is a unique set of methods that constitute a data-driven or evidence-based approach to understanding the world (Bunge, 1996; Haack, 2007). Science and scientific methods have allowed us to make incredible advances not only in fields like physics, biology, and medicine, but also in special education (Cook & Odom, 2013). By defending science, we safeguard one of our most effective tools for making progress and improving education for students with disabilities. Second, science is critical for informing just and equitable public policy decisions. Third, by defending science, we promote a culture of intellectual and professional curiosity, inquiry, and healthy skepticism that is indispensable for increasing our knowledge and understanding of teaching students with disabilities (Haack, 2007).

One of the most pressing and complex problems in special education is the gap between research and practice. A possible factor is that not all special educators are trained in empirical methods and scientific mindsets that might allow them to make more informed decisions in their work (Fixsen et al., 2013). On the “research” side of the gap, special education and related research currently offer few answers that are not fragmented (or partial, not absolute or true without exception). Closing the gap between research and practice requires thinking about the process by which scientific knowledge is accumulated and applied. Francis Bacon (1620/2008)

compared narrow empiricists (those with an exclusive focus on empirical research) to the ants, as they collect experimental results, accumulate them, and try to use them. He compared dogmatists (“pure” thinkers) to spiders because they “make cobwebs out of their own substance” (p. 45). His own method he compared to the bee, which gathers “material from the flowers of the garden and of the field, but transforms and digests it by a power of its own” (Bacon, 1620/2008, p. 45). This has been interpreted to mean that experimental data are transformed into knowledge by reason (Bunge, 1996). It may mean more than that.

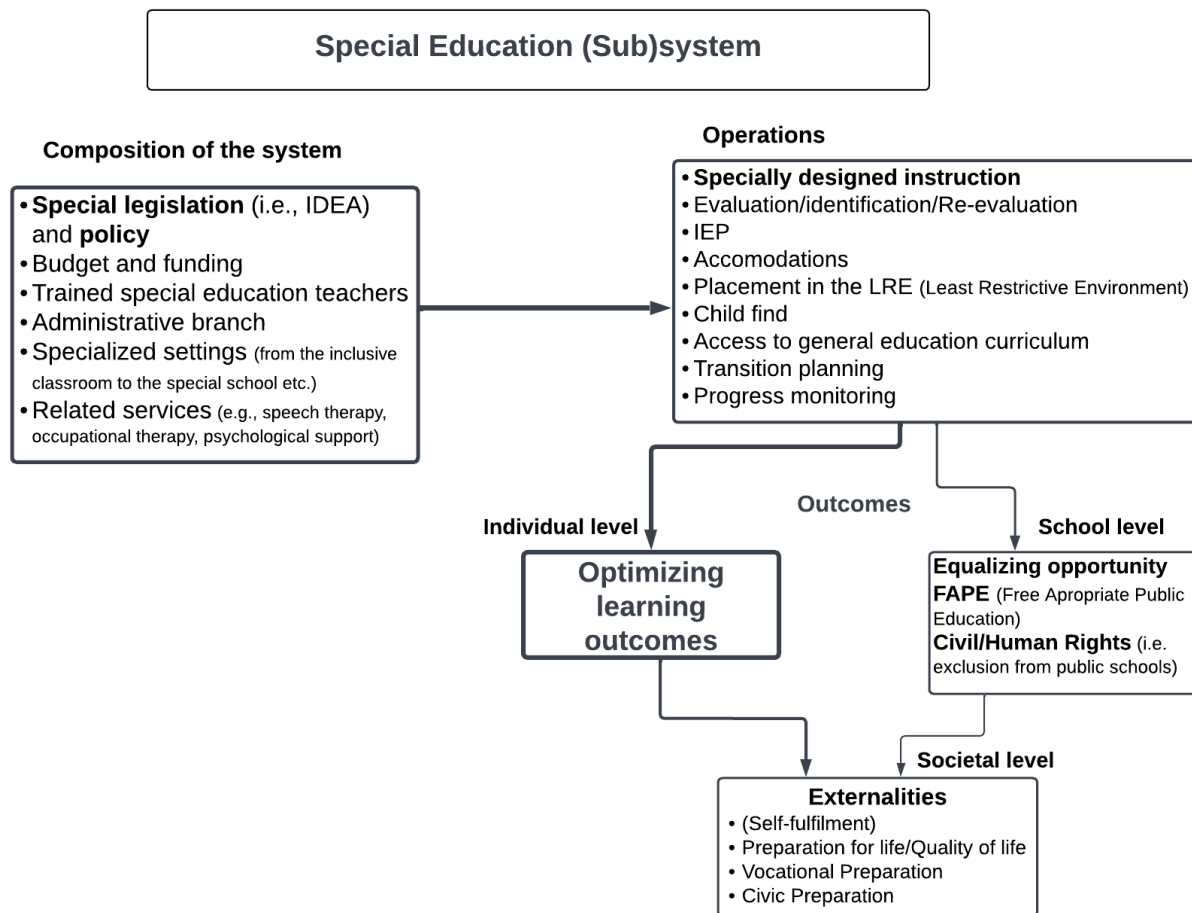
Burnham (1987) argues that to have the greatest possible impact, science should have a negative program against error and anti-scientific dogmas. That was particularly effective in the 19th century, but became attenuated during the 20th and 21st centuries because of mass media, social media, and some university politics (e.g., prioritizing profits over the pursuit of knowledge and academic excellence). However, the 19th-century proponents of science assumed that their work and message were not only “empirical” in a narrow sense, but also rational and societal (Burnham, 1987). On the one hand, some in our field tend to keep a sense of positivism, perceiving it as a data-loving philosophy (prioritizing data over theory to an excessive degree) and have lost the old “enthusiasm” to defend science. On the other hand, dogmatists are armed with a single perspective that can allegedly explain everything and offer straightforward and complete answers about the nature of disability and the education of persons with disabilities. Although dogmatists cannot escape their own ideology loop because of a hypertrophic “oughtness,” we should not underestimate the fact that they provide an easy way to mollify intellectual curiosity and provide a virtually doubt-free worldview on disability. To counter this imbalance between scientific inquiry and anti-scientific dogma, a “soft science” like special education research must regain the old “enthusiasm” to defend science, as Burnham (1987) and

McIntyre (2019) have suggested. Defending science against social constructionism and cognitive relativism can also serve a constructive purpose by enabling a rediscovery of the true purpose and direction of authentic scientific research in special education.

The Telos of Special Education (Sub)system

The special education (sub)system also has very concrete and tangible components: a continuum of alternative placements (from the inclusive classroom to the special school) and services, a special workforce (special education teachers, paraprofessionals, etc.), and a special budget (see Figure 3). As a public good, the special education (sub)system refers also to the legal, administrative, and educational policy dimensions of special education, as well as logistical dimensions (e.g., professional training, authority, and autonomy) necessary for special education's functioning as part of a national education system. The main attacks on special education in the USA and worldwide are against the existence of a distinct special education subsystem, perhaps primarily because of its visibility (Anastasiou et al., 2018, 2010).

Because approximately 85% of students with disabilities in the United States receive special education services within regular (i.e., not special or separate) schools (US Department of Education, 2022, p. 56), the special education system is substantially embedded in the national educational system. For this reason, we refer to a (sub)system. Figure 3 depicts the composition of the (sub)system, its operations, and its outcomes at the individual student level (specially designed instruction to optimize learning and positive life outcomes for students with disabilities, that is, their well-being), school level (equalizing opportunity, free, appropriate public education, civil and human rights, and societal level (externalities such as preparation for and quality of life, vocational preparation, civic preparation).

Figure 3. Special education subsystem.

Prior to 1975, children with the most severe disabilities were often denied any and all public education. Parents had no option of public special education for their children. Special education was designed to include more (but, initially, not all) students with disabilities in public education, but not in the typical graded classrooms (Martin, 2013; Weintraub & Abeson, 1974). It was an inventive way of educating students who were not successfully learning in the general education that was offered in public schools. Before IDEA, special, *ungraded classes* were the

first form of special education in public schools for students with comparatively mild disabilities. Special *schools* served some (but, again, not all) of those with more severe intellectual and developmental disabilities and those with severe sensory disabilities.

Importantly, values-driven advocacy played a central role in the development and evolution of the special education system. Advocacy preceding the *Education for All Handicapped Children Act* (EAHCA) prominently featured values such as equality of opportunity and fair treatment of students with disabilities (Martin, 2013). In justifying the EAHCA, Weintraub and Abeson (1974) emphasized the importance of equal educational opportunities within the larger framework of civil rights legislation. As Weintraub and Abeson (1974) stated,

“[t]he legality of denying public education to handicapped children by exclusion, postponement, or any other means is increasingly being challenged. The basis for this challenge comes from the *equal protection* clause of the 14th Amendment to the U.S. Constitution, which guarantees to all the people equal protection of the laws...

The application of the equal protection concept to the education of handicapped children [i.e., children with disabilities] will force public education to reexamine the term *equal educational opportunity* (p. 526; emphasis added)... Today the meaning of *equal educational opportunity* ... is "equal access to differing resources for differing objectives." (pp. 526-527; emphasis added)

Equality of opportunity, equity, and social justice are all value-driven concepts that aim to promote a fairer education system and a fairer society. All three of these concepts are underpinned by the basic idea of *fairness* (Bunge, 2003; Farrell, 2010). Furthermore, the concept of fairness is intertwined with other essential ethical principles, such as non-discrimination, equal

respect and recognition, equal love, care, and solidarity (Brighthouse, 2007). However, these component concepts are not considered interchangeable by many today. Each concept can typically include distinct values or implied aims. For the sake of clarity, we will make distinctions by taking into account the historical use of these terms (equality of opportunity, equity, social justice) and their current meaning. We note that the meaning of these three concepts—their scope, resonance, differentiation, and operationalization—can differ depending on the specific contexts in which they are applied.

Equality of opportunity is a classical liberal aim focused on providing everyone with an equal chance to succeed (Brighthouse, 2007). Until recently, the meaning of equity at policy level was generic and imprecise (Terzi, 2010). Currently, equity has a stronger resonance in many kinds of advocacy and focuses on addressing existing inequalities by providing additional support to those who have been historically marginalized, including students with disabilities, and students from minority backgrounds. *Social justice*, which can include distributive justice, is a common term in liberal egalitarianism (e.g., Rawls, 1971); it is also expressed in some Christian traditions, European social democracy, and the social welfare state. Social justice encompasses a broader range of concerns than equality and equity and seeks to address systemic and institutional injustices (Sandel, 2009).

Historically, the idea of social justice has had a strong economic or material dimension. Sandel (2009) observed that when we discuss distributive justice, a main aspect of social justice, “we are concerned mainly about the distribution of income, wealth, and opportunities” (p. 192). Similarly, when considering justice in education for students with disabilities, the main concern is the distribution of resources, including funding, teachers, qualified teachers, paraprofessionals, supplies, and materials. For example, low teacher-to-student ratios are almost impossible to

maintain across general education, but are provided in many cases to students with disabilities. Teacher-to-student ratios can affect the quality of teaching and appropriate learning experiences. An emphasis on distributive justice explains, in part, how the emergence and development of special education settings in European countries (e.g., Greece) was linked to the development of social welfare state (Anastasiou et al., 2015).

Thus, social justice for students with disabilities is dependent on criteria for treating children either the same or differently, and examining the “moral superiority [of] treating children the same when there appear to be grounds for not doing so” (Farrell, 2010, p. 28). As Farrell (2010) put it, “social justice is best served where children are helped if they have difficulties. This may involve different elements of provision. Special education values children’s education and development and nurtures it” (p. 27). To attain social justice, different treatment should be justified on two criteria: relevance and proportion. Relevance to learning requires that students be treated more or less the same, “unless there are relevant educational reasons for treating them differently” (Anastasiou et al., 2018, p. 689). The principle of proportionality in specialized and intensive education means that students should only be treated differently if there are relevant justifications, and this different treatment should be proportional to the nature and intensity of their special educational needs (Anastasiou et al., 2018).

Nevertheless, some see any separation of children from the general education environment as bifurcation or segregation, regardless of the rationale for such a difference in place. Acevedo et al. (2023) wrote,

... just as the existing bifurcated educational system reinforces and perpetuates racist and ableist harms, the design and implementation of an alternative, transformed educational system can advance the liberatory aims and promise of Disability Justice. (p. 16)

In a society that aims to educate all students, it does not contradict the principles of equality for some students to follow distinct curricula or to be taught in specialized settings when justified based on the criteria of relevance and proportion. Quite the contrary, this approach extends to *all* student equality of opportunity, fairness, and social justice, and is necessary to achieve the Telos of special education, to optimize learning (Anastasiou et al., 2018).

Challenges to the Special Education (Sub)system

In the most extreme cases, people have written that special education's supposed benevolence is "cloaked" such that its white supremacist underpinnings are hidden (e.g., Thorius, 2019). It has been called racist, ableist, and an illegitimate way of segregating children (e.g., Acevedo et al., 2023).

Others have embraced various reforms to reimagine special education (e.g., Rufo & Causton, 2022). Many proposed reforms are especially appealing to those who want simple, uncomplicated solutions to complex problems. Often, these reforms are advanced without careful consideration of the problems of educating students with disabilities, existing efforts to address these problems, or how special education differs from other social programs. Thus, although we mention just a few examples, our analysis applies to other reforms that seek to circumvent or dismantle the special education system, particularly key provisions of IDEA. Such reforms typically reflect inadequate consideration of (a) the full range and diversity of students' learning characteristics and the implications of this diversity for education, (b) the capacity of teachers to appropriately and effectively address the full range and diversity of all students' learning needs; (c) the instructional constraints of different educational settings, including general education classrooms; (d) the nature of appropriate specially designed instruction and the conditions

required to deliver it, and (e) the negative lifelong consequences of education that is neither appropriate nor effective.

We briefly discuss four misguided ideas that threaten the existence of special education, existing or reimagined: (a) calling for full inclusion, (b) rejecting the ideas of special education and disability, including resistance to naming or refusal to name disabilities, (c) advocating the elimination of the CAP, and (d) replacing special education with a third or fourth tier of a multi-tiered system of supports (MTSS).

Calling for Full Bodily Inclusion

A robust and forceful, even militant, call for full bodily inclusion of students with disabilities has become a world-wide passion (see Anastasiou et al., 2018; Kauffman et al., 2020, 2021, 2022). “Bodily” inclusion means the physical inclusion of all students in the same setting. For decades, the full inclusion movement (FIM) has promoted the idea that all students, including all students with disabilities, can and should be taught in the general education classroom (see Fuchs & Fuchs, 1994). The FIM advocates eliminating all specialized educational placements (in IDEA, the CAP) and allowing no placement options other than the general education classroom for all students with disabilities. The FIM also advocates for merging general education and special education such that special education no longer exists as a distinct system. Ideology-driven hostility to specialized placements and, more broadly, special education as a distinct system is evident when CAP is called the “original sin” of IDEA (Cornett & Knackstedt, 2020), and when hopes for the demise of special education are expressed both explicitly and implicitly (Acevedo et al., 2023; Slee, 2018; Swift Schools, 2023).

To achieve the goal of full bodily inclusion, some propose a utopian "transformation" of public schools, apparently enabling schools to provide appropriate education for all students,

regardless of learning differences, in general education classrooms with no exceptions (i.e., “*All Means All*,” [Acevedo et al., 2023, p. 16; capitalized and italicized in original]; see also Slee, 2018; SWIFT schools, 2023). Full inclusion advocacy is bolstered by mostly unfounded and misleading claims that special education is a dangerous way of thinking about disabilities, is fundamentally oppressive, and promotes “segregation” (e.g., Connor, 2020).

Advocacy for full bodily inclusion and hostility to special education are based largely on ideological arguments with little empirical support (Hornby & Kauffman, 2023). While efficacy research should be of little interest to those who attach no special value to it, full inclusion advocates nonetheless claim, misleadingly, that “studies show” inclusion is best for *all* students. There are studies indicating that some practices improve outcomes for some students with disabilities in inclusive settings. However, that research does not indicate that inclusion is best for *all* students. Claims to the contrary notwithstanding, research does not support the belief that all students can be appropriately and effectively taught in the general education classroom (e.g., Cook & Cook, 2020; Fuchs et al., 2023).

The adoption of full bodily inclusion as envisioned by the FIM would negatively impact or undermine special education in at least three ways. First, with full bodily inclusion, there is inadequate consideration of individual differences in instructional needs both within and across different disability categories. Many full inclusion advocates do not specify in their advocacy of the type of disabilities they are referencing. Indeed, many full inclusion advocates insist that, at least in education, such distinctions are illusory and motivated only by malice. Nevertheless, IDEA now recognizes 13 different categories of disabilities, and all can occur in any combination and at any level of severity. Moreover, what is advocated for one particular group

(e.g., intellectual disability), may or may not be generalized to other groups (e.g., learning disabilities or emotional and behavioral disorders).

Second, full bodily inclusion reduces LRE to one dimension (place, assumed in all cases to be the general education classroom) and, in doing so, neglects other critical dimensions of what is more or less restrictive for the individual student. "Inclusion" means different things to different people, but the most common meaning involves place or placement—the student is "included" if and only if that student is physically present in a general education classroom. However, under current law, the amount of time present in a general education classroom or other setting is an individual determination to facilitate the delivery of the most *appropriate* and effective IEP for that student. The belief that place by itself determines restrictiveness or appropriateness, and that any instruction provided in places other than the general education classroom is exclusionary and “segregationist,” is based on oversimplification of the concept of LRE and misunderstanding of the ethical concerns the LRE principle is intended to address.

Inclusion in the physical or bodily sense is considered feasible for *all* students by some, on the basis of a narrow sense of equality (sameness of educational treatment) without the relevance of the learning needs and behavioral needs or the intensity of instruction to fulfill them (e.g., Choi et al., 2020; Sailor et al., 2021). Full inclusion advocates argue that instruction must be provided in one specified environment alone. In effect, it is to say, "Yes, the instruction is appropriate—as long as it is done in this particular place that is open to all students." Paradoxically, then, inclusion is defined as instruction in a single, nonvarying place (Kauffman, 2022).

Rejecting the Provisions of Special Education and the Concept of Disability

Some seem to say that special education *is* the problem (e.g., Acevedo et al., 2023; Ferri, 2008; Linton, 2006, à la' Reagan, "government *is* the problem") or reject the existence of special education outright.

In a keynote address at the International Special Education Congress (ISEC) in Manchester, UK, Mike Oliver (according to some, the “father” of Disability Studies (DS); see Slee, 2011), was said to have announced that he was there “to dance on the grave of special education” (Slee, 2011, p. 75). However, in his own written comments, Oliver (2000) stated something less inflammatory: “I was and remain implacably opposed to the very existence of special education” (p. 6). Slee (2018) also expressed blanket disapproval of special education and suggested that special educational needs are mythical. Baglieri et al. (2011) stated “what special education strives to enforce, DS seeks to dissolve” (p. 2130).

Some proponents of DS seem to consider atypical development and special needs to be myths justifying special education (e.g., Baglieri et al., 2011; Slee, 2018). Something considered mythical can be ignored without criticism, except from those who consider it a reality. Alternatively, disabilities may be said to be merely examples of the to-be-expected variations in human beings that deserve no "special" treatment, merely understanding and acceptance as normal differences.

If special educational needs and disability are considered social constructions, myths or another form of diversity, then it is understandable that the corresponding need for special education is mythical, too. Furthermore, when disability is not considered a reality, but just another form of diversity that can be treated like all others (e.g., diversities of gender or gender identity, race or racial identity, skin hue, tribe, or socio-economic status; for example, see Acevedo et al., 2023; Slee, 2018, 2020), then why provide a special education? The false

equivalence of color or racial identity and disability is decades old (e.g., Stainback & Stainback, 1991). Still, it has thrived in an abstract intellectual world in which the differences among differences are ignored or denied. If education is considered not to be significantly different from other social enterprises, and appropriate instruction is not considered the priority of schooling, then disability can be reduced to another category of difference or diversity and special education denied.

Yet, another threat to special education's existence is resistance to naming it (Kauffman, et al., 2023). Of course, whatever is not to be named cannot be discussed, and not naming special needs or special education or categories of disability (or even disability itself) is a strategy for denying the existence of either. Ironically euphemistic resistance to naming implies that the thing not named is too terrible to acknowledge, and thus seems unlikely to reduce stigma or promote acceptance. As Green (2022) wrote, “euphemisms are what we use when we want to obscure something.” Of course, any word—even a “new” or “approved” word intended to remove hurt or sting—can be used to hurt or sting. The more substantive hurt or sting is in what the hurler of an epithet makes of that to which the word refers.

Advocating elimination of the CAP

A great temptation of those who would reform education is eliminating the CAP and, therefore, LRE. Some have described the concept of LRE rather than uniform placement of children with disabilities as among the worst faults of special education (e.g., Cornett & Knackstedt, 2020). Determining the CAP and LRE require difficult, nuanced decisions of all involved in education (Kauffman, Burke et al., 2022). The CAP is made moot and the LRE is rendered irrelevant only when the CAP does not exist, for then there are no choices or decisions to be made, only an ideology to be served. Life is made simpler when choices are eliminated.

However, if the history of social policy has one lesson for us, it is that the elimination of options in the service of a pure ideology is apt to be counterproductive (Kauffman et al., 2020, 2021).

Replacing Special Education with a Tier in MTSS.

The implementation of multi-tiered systems of support (MTSS) raises many questions about both general and special education. The MTSS goal of improving instruction and behavioral support with evidence-based practices and better matching instruction to student needs is valid. Since its inception, a hope for MTSS has been that will strengthen special education (e.g., Lane et al., 2020). However, initial enthusiasm that MTSS might mitigate or even eliminate special education's basic and perpetual problems has faded (Kauffman, 2021; Kauffman et al., 2022; Wiley et al., 2022, in press). An urgent and unresolved problem is that the role of special education within MTSS is not clearly defined either legally or practically (Wiley et al., 2022). MTSS perspectives range from establishing IDEA-based special education as the most intensive tier to replacing special education with the assumption that MTSS will better serve all students and make possible full inclusion (see Wiley et al., 2022). So far, no MTSS research demonstrates that it meets the special educational needs of all students with learning-related disabilities. Special education is threatened by an absolutist MTSS advocacy when it ignores or misrepresents what is known and not known about the limitations of MTSS for delivering appropriate and effective SDI to students with disabilities.

The Telos of Specially Designed Instruction

Specially designed instruction (SDI) is the legal and ultimate goal of special education. It is also the *executive function* of the special education subsystem. Understanding SDI as part of special education's Telos requires understanding how SDI should be conceptualized and delivered. What is well-planned and well-delivered SDI in special education?

SDI refers to individualized, intensive, goal-oriented educational programs that incorporate evidence-based practices, including systematic and explicit instruction (L. S. Fuchs et al., 2008, 2015; Fuchs et al., 2023; Kauffman et al., 2018; Pullen, 2022). *Explicit instruction* means that concepts and skills are taught directly, with full teacher guidance, to ensure the acquisition and mastery of skills and knowledge. *Systematic instruction* means that SDI is sequenced to optimize learning (Kauffman et al., 2018; Pullen & Hallahan, 2015; Pullen, 2022).

The purpose and goals of SDI are to (a) maximize learning and related positive outcomes for students with disabilities, as appropriate to their individual circumstances, and (b) reduce the gap between what individual students *can* learn and what students *do* learn. Reducing this gap requires instruction that is evidence-based, responsive to individual differences, and guided by objective measurement of student learning (L. S. Fuchs et al., 2015; Pullen, 2022).

What kind of knowledge and skills are required of teachers? Specialized instruction is designed to address disability in learning, that is, the kinds of cognitive, social, and behavioral limitations that students experience, addressing the difficulty in foundational academic knowledge and skills (e.g., reading decoding, basic arithmetic skills, multiplication fact difficulties, etc.), social and life skills, and quite often significant gaps in content knowledge.

Even though special education has been conceptualized as *instruction, not place*, as *service, not placement*, a single physical home without a continuum of placements limits the types of services any teacher can offer. Carefully selecting options of placement is a way of addressing the core problem of unusual variations in capability and achievement within an age group (Kauffman et al., 2018). This is not to say that any variation in ability and achievement inherently precludes effective teaching and learning or to deny the fact that the smaller the class, the better the outcome is likely to be. For example, Bus and van Ijzendoorn (1999), in their meta-

analysis of training studies in phonemic awareness, found that small group instruction produced larger effect sizes than teaching students individually or in large classes. Other meta-analyses found that small group instruction in phonemic awareness or phonics made no difference in effect size from individual instruction (Ehri, Nunes, Willows, et al., 2001; Suggate, 2016; but cf. Ehri, Nunes, Stahl, et al., 2001). In short, although special education is a service, not a place, the place constrains the kind of services that can be offered and their effectiveness (Kauffman et al., 2018). Smaller learning groups allow more individualization, teacher-pupil interaction, progress monitoring, and responsive feedback (Kauffman et al., 2018). For the past five decades, the method for providing special education services has been individualization, the individualized education program (IEP). Individualization is the *sine qua non* of delivering special education services (Hallenbeck, 2022; Kauffman et al., 2018; Pullen & Hallahan, 2015).

Challenges to Specially Designed Instruction

Full inclusion would redefine specialized instruction into differentiated instruction, which will only be provided in a general education setting. Differentiated instruction may indeed be part of special education services, and it may be provided in general education settings as part of accessing the general education curriculum. However, some students will need, based on the severity of the disability, more intensive specialized instruction. Moreover, there are circumstances under which this instruction may need to be provided in a separate setting, by a specialist.

The focus on full bodily inclusion fundamentally rejects this aspect of specially designed instruction. This meaning diverges from one based on need and instruction. A different meaning of "inclusion" is *inclusion in appropriate instruction*, regardless of the place it is provided (Kauffman & Badar, 2020; Kauffman et al., 2022; Warnock, 2005).

If one assumes that specially designed *instruction* is the ultimate purpose of special education, then special education's telos requires understanding how that instruction should be conceptualized and delivered. Like the instruction itself, *where* such instruction should be provided will vary for individuals—unless one assumes that place never constrains or always enhances instruction. When special education is conceptualized as *instruction*, we conclude that it is about well-planned and well-delivered *specialized* interventions provided under the best possible conditions (see Pullen, 2022; Pullen & Hallahan, 2015). Moreover, we know exposure to curriculum is not the same as effective instruction (e.g., Cook & Odom, 2013; Fuchs et al., 2008, 2010, 2015).

Conclusion

The “Telos” of special education has been contested and, in our view, widely misunderstood. It has been muddled, perhaps by well-meant but nevertheless destructive rhetoric. Although arguably well-intentioned, several ideas and movements—among them, the FIM, DisCrit, and MTSS—are harmful to many students with disabilities and undermine special education’s Telos (its *raison d’être*). One of the reasons for this is a misunderstanding of the three functions of special education that we have described (the tripartite nature of special education's Telos), failure to understand the differences in special education's Telos as a matter of research, as a matter of system (including law and policy), and as a matter of instruction.

Empirical research is necessary for SDI. Knowing the “truth” allows us to develop and identify effective, evidence-based SDI practices and to better understand disabilities and their implications for instruction. Without scientific truth, we are left with authority, ideology, superstition, anecdotes, etc., which cannot identify evidence-based SDI to optimize learning. Without empirical research, the best way to build accurate knowledge, special education cannot

fulfill its ultimate Telos (SDI). Thus, in special education, the Telos of research (truth-seeking) is to make it possible for special education to fulfill its overall and ultimate Telos.

By fetishizing place, FIM can undermine the provision of a Free and Appropriate Public Education (FAPE) for students with disabilities (Yell & Prince, 2022). Some DS and DisCrit advocates have called implicitly and explicitly for the abandonment and death of special education, at least as a visible, detectable, and distinct part of education. MTSS blurs the distinction between general and special education and suggests that the Telos of general and special education are the same.

What will occur if special education is not a visible, distinctive, identifiable part of the public education system? The answer is in the third, contemporary meaning of “Telos”—death. If special education is not identifiable and nameable in the scheme of public education, then it will die (Kauffman et al., 2023). It will become unmentionable, unthinkable, a concept of the past.

However, if the need for special education is real, wealthy families will always have a choice to buy private special education. The poor and not-well-connected families depend on *public* education and cannot escape from whatever special education provides as part of that system (Anastasiou et al., 2018). If we restrict choices within the public education system, such as the elimination of special schools and special classes as in some other nations of the world (Anastasiou et al., 2020), then we in the U. S. will return to the era of neglect of those students with disabilities. It will be as if these students do not matter; they will be isolated in general classrooms and drop out of school as soon as they can. Beneath the nice words and reassurances of good intentions, bodily inclusion without inclusion in *learning* (regardless of where it occurs) means a bleak and bitter future for poor students with disabilities.

Contrary to what has been presented to the public, bodily inclusion is not an extension of options; it is a narrowing of them. Proposals like those of SWIFT Schools (2023), Slee (2011, 2018), and Acevedo et al. (2023) would return us to earlier years of the 20th century, without a national special education subsystem that meets the wide range of learning needs of students with disabilities. As Kauffman and colleagues (e.g., Hallahan et al., 2023; Kauffman, 2022; Kauffman et al., 2017, 2023) have argued, special education should embrace its visibility, distinctiveness, identity, and focus. Special education should focus on developing and implementing evidence-based SDI, rejecting the notion that place of instruction is more important than the practice of instruction *per se*.

The ultimate purpose of special education—its *telos*—is appropriate instruction (i.e., that is specially designed) for individual exceptional children. Distractions from that Telos and retreat from scientific truth and truth-informed social justice will only harm students with disabilities in the long term, and result in proposals to end the CAP and LRE provisions of current federal law or even eliminate special education altogether. In the face of such distractions, we urge advocates, researchers, and practitioners to support the major requirements of current federal law (i.e., FAPE, IEP, CAP, and LRE) and the tripartite functions of special education.

References

- Acevedo, S. M., Brown, L. X. Z., & Cowing, J. L. (2023, August 5). Visioning alternatives to segregated education: A disability justice and access-center pedagogy approach. *Critical Sociology*, 1-21. <https://doi.org/10.1177/08969205231188737>
- Anastasiou, D., Gregory, M., & Kauffman, J. M. (2018). *Article 24: Education*. In I. Bantekas, M. A. Stein, & D. Anastasiou, *The UN Convention on the Rights of Persons with Disabilities: A Commentary* (pp. 656 – 704). Oxford University Press.
- Anastasiou, D., Felder, M., Correia, L., Shemanov, A., Zweers, I. & Ahrbeck, B. (2020). The impact of Article 24 of the CRPD on special and inclusive education in Germany, Portugal, the Russian Federation, and Netherlands. In J. M. Kauffman (Ed.), *On educational inclusion: Meanings, history, issues and international perspectives* (pp. 236-245). Routledge.
- Anastasiou, D., & Kauffman, J. M. (2013). The social model of disability: Dichotomy between impairment and disability. *Journal of Medicine and Philosophy*, 38, 441-459.
<http://dx.doi.org/10.1093/jmp/jht026>
- Anastasiou, D., Kauffman, J. M., & Michail, D. (2016). Disability in multicultural theory: Conceptual and social justice issues. *Journal of Disability Policy Studies*, 27, 3-12.
<http://dx.doi.org/10.1177/1044207314558595>
- Anastasiou, D. & Kauffman, J. M. (2019). Cultural politics, ideology, and methodology in disproportionality research: A rejoinder. *Journal of Disability Policy Studies*, 30(2), 105-110. <https://doi.org/10.1177/1044207319863647>

- Anastasiou, D. & Keller, C. (2017). Cross-national differences in special education: A typological approach. In J. M. Kauffman, D. P. Hallahan, & P. C. Pullen (Eds.), *Handbook of special education* (2nd ed.) (pp. 897-910). Routledge
- Annamma, S. A., Connor, D., & Ferri, B. (2013). Dis/ability critical race studies (DisCrit): theorizing at the intersections of race and dis/ability. *Race Ethnicity and Education*, 16(1), 1-31. <https://doi.org/10.1080/13613324.2012.730511>.
- Annamma, S. A., Ferri, B., & Connor, D. (2022). Introduction to the special issue-imagining possible futures: Disability critical race theory as a lever for praxis in education. *Teachers College Record*, 124(7) 3–16. <http://dx.doi.org/10.1177/01614681221111427>
- Bacon, F. (1620/2008). *The new organon (or true directions concerning the interpretation of nature)*. Dodo Press.
- Baglieri, S., Bejoian, L. M., Broderick, A. A., Connor, D. J., & Valle, J. (2011). [Re]claiming “inclusive education” toward cohesion in educational reform: Disability studies unravels the myth of the normal child. *Teachers College Record*, 113(10), 2122-2154. <https://doi.org/10.1177/016146811111301>
- Brighouse, H. (2007). Equality of opportunity and complex equality: The special place of schooling. *Res Publica*, 13(2), 147–158. <http://dx.doi.org/10.1007/s11158-007-9029-8>
- Bunge, M. (1974). *Treatise on basic philosophy. Semantics II: Interpretation and truth*. Reidel.
- Bunge, M. (1991). What is science? Does it matter to distinguish it from pseudoscience? A reply to my commentators. *New Ideas in Psychology*, 9(2), 245-283. [http://dx.doi.org/10.1016/0732-118X\(91\)90030-P](http://dx.doi.org/10.1016/0732-118X(91)90030-P)
- Bunge, M. (1996). *Finding philosophy in social science*. Yale University Press.
- Bunge, M. (1999). *Social science under debate*. University of Toronto Press.

- Bunge, M. (2003). *Philosophical dictionary*. Prometheus.
- Bunge, M. (2012). The correspondence theory of truth. *Semiotica*, 188, 65–75.
<https://doi.org/10.1515/sem-2012-0004>
- Bunge, M. (2017). *Doing science in the light of philosophy*. World Scientific.
- Burnham, J. C. (1987). *How superstition won and science lost: Popularizing science and health in the United States*. Rutgers University Press.
- Bus, A., & van Ijzendoorn, M. (1999). Phonological awareness and early reading: A meta-analysis of experimental training studies. *Journal of Educational Psychology*, 91, 403-414. <http://dx.doi.org/10.1037/0022-0663.91.3.403>
- Choi, J. H., McCart, A. B., & Sailor, W. (2020). Achievement of students with IEPs and associated relationships with an inclusive MTSS framework. *The Journal of Special Education*, 54(3), 157-168. <http://dx.doi.org/10.1177/0022466919897408>
- Connor, D. J. (2020). “I don’t like to be told that I view a student with a deficit mindset”: Why it matters that disability studies in education continues to grow. *Canadian Journal of Disability Studies*. <https://cjds.uwaterloo.ca/index.php/cjds/article/view/689/936>
- Cook, B. G., & Cook, L. (2020). An examination of highly cited research on inclusion. In J. M. Kauffman (Ed.), *On educational inclusion: Meanings, history, issues and international perspectives* (pp. 130-159). Routledge.
- Cook, B. G., & Odom, S. L. (2013). Evidence-based practices and implementation science in special education. *Exceptional children*, 79(2), 135-144.
<https://doi.org/10.1177/001440291307900201>

- Cornett, J., & Knackstedt, K. M. (2020). Original sin(s): Lessons from the US model of special education and opportunity for leaders. *Journal of Educational Administration, 58*(5), 507-530. <http://dx.doi.org/10.1108/JEA-10-2019-0175>
- Ehri, L. C., Nunes, S. R., Stahl, S. A., & Willows, D. M. (2001). Systematic phonics instruction helps students learn to read: Evidence from the National Reading Panel's meta-analysis. *Review of Educational Research, 71*, 393-447. <http://dx.doi.org/10.3102/00346543071003393>
- Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly, 36*, 250-287. <http://dx.doi.org/10.1598/RRQ.36.3.2>
- Farrell, M. (2010). *Debating special education*. Routledge. Ferri, B. (2008). Doing a (dis)service: Reimagining special education from a disability studies perspective. In W. Ayers, T. M. Quinn, & D. Stovall (Eds.), *Handbook of social justice in education* (pp. 417-430). Taylor & Francis.
- Ferri, B. (2008). Doing a (dis)service: Reimagining special education from a disability studies perspective. In W. Ayers, T. M. Quinn, & D. Stovall (Eds.), *Handbook of social justice in education* (pp. 417-430). Taylor & Francis.
- Foucault, M. (1980). Truth and power. In Foucault (Ed.) *Power/Knowledge: Selected interviews and other writings 1972-1977* (English ed. C. Gordon; pp. 109-133). Pantheon Books.
- Fixsen, D., Blase, K., Metz, A., Van Dyke, M. (2013). Statewide implementation of evidence-based programs. *Exceptional children, 79*(2), 213-230. <https://doi.org/10.1177/0014402913079002>

- Fuchs, D., & Fuchs, L. S. (1994). Inclusive schools movement and the radicalization of special education reform. *Exceptional Children*, 60, 294-309.
<http://dx.doi.org/10.1177/001440299406000402>
- Fuchs, L. S., Fuchs, D., Compton, D. L., Wehby, J., Schumacher, R. F.; Gersten, R. & Jordan, N. C. (2015). Inclusion versus specialized intervention for very-low-performing students: What does *access* mean in an era of academic challenge? *Exceptional Children*, 81(2), 134-157. <https://doi.org/10.1177/0014402914551743>
- Fuchs, D., Fuchs, L. S., & Stecker, P. M. (2010). The “blurring” of special education in a new continuum of general education placements and services. *Exceptional Children*, 76(3), 301-323. <http://dx.doi.org/10.1177/001440291007600304>
- Fuchs, L. S., Fuchs, D., Powell, S. R., Seethaler, P. M., Cirino, P. T., & Fletcher, J. M. (2008). Intensive intervention for students with math disabilities: Seven principles of effective practice. *Learning Disability Quarterly*, 31, 79–92. <https://doi.org/10.2307/20528819>
- Fuchs, D., Mirowitz, H. C., & Gilbert, J. K. (2023). Exploring the truth of Michael Yudin's claim: The more time students with disabilities spend in general classrooms the better they do academically. *Journal of Disability Policy Studies*, 33(4), 236–252.
<http://dx.doi.org/10.1177/10442073221097713>
- ~~Gordon Gould, P., & Hornby, G. (2023). *Inclusion at the crossroads: Exploring effective special needs provision in global contexts*. Routledge.~~
- Green, H. (2022, September 25). We have reached peak mental health. *New York Times*.
<https://www.nytimes.com/2022/09/20/opinion/us-mental-health-awareness.html>
- Haack, S. (2007). *Defending science within reason: Between scientism and cynicism*. Prometheus.

- Hallahan, D. P., Pullen, P. C., & Kauffman, J. M. (2023). *Exceptional learners: An introduction to special education* (15th ed.). Pearson Education.
- Hallenbeck, B. A. (2022). Special education's deterioration and needs: A personal perspective. In J. M. Kauffman (Ed.), *Revitalizing special education: Revolution, devolution, and evolution* (pp. 189-202). Emerald.
- Hornby, G., & Kauffman, J. M. (2023). Special education's zombies and their consequences. *Support for Learning, 38*(3). Doi: 10.1111/1467-9604.12451
- Hume, D. (1740/2009). *A treatise of human nature*. The Floating Press.
- Ings, S. (2016). *Stalin and the scientists. A history of triumph and tragedy 1905–1953*. Faber & Faber.
- Kauffman, J. M. (2022). This one, that that one: Toward revitalizing special education. In J. M. Kauffman (Ed.), *Revitalizing special education: Revolution, devolution, and evolution* (pp. 1-41). Emerald.
- Kauffman, J. M. (2021). The promises and limitations of educational tiers for special and inclusive education. *Education Sciences, 11*(7). <https://doi.org/10.3390/educsci11070323>
- Kauffman, J. M., Ahrbeck, B., Anastasiou, D., Badar, J., Felder, M., & Hallenbeck, B. A. (2021). Special education policy prospects: Lessons from social policies past. *Exceptionality, 29*(1), 16-28. <http://dx.doi.org/10.1080/09362835.2020.1727326>
- Kauffman, J. M., Anastasiou, D., Badar, J., & Hallenbeck, B. A. (2020). Becoming your own worst enemy: Converging paths. In C. Boyle, S. Mavropoulou, J. Anderson, & A. Page (Eds.), *Inclusive education: Global issues & controversies* (pp. 73-88). Brill Sense.
- Kauffman, J. M., Anastasiou, D., Burke, M. D., Felder, M., Hornby, G., Lopes, J., & Wiley, A. L. (2023, May 22). Adventures in naming EBD realities: How words matter for special

- education. *Journal of Emotional and Behavioral Disorders*.
<https://doi.org/10.1177/10634266231172929>
- Kauffman, J. M., Anastasiou, D., & Maag, J. W. (2017). Special education at the crossroads: A crisis of identity and the need for a scientific reconstruction. *Exceptionality*, 25(2) 139-155. <http://dx.doi.org/10.1080/09362835.2016.1238380>
- Kauffman, J. M., & Badar, J. (2014). Instruction, not inclusion, should be the central issue in special education: An alternative view from the USA. *Journal of International Special Needs Education*, 17, 13-20. <http://dx.doi.org/10.9782/2159-4341-17.1.13>
- Kauffman, J. M., & Badar, J. (2020). Definitions and other issues. In J. M. Kauffman (Ed.), *On educational inclusion: Meanings, history, issues and international perspectives* (pp. 1-24). Routledge.
- Kauffman, J. M., Badar, J., & Wiley, A. L. (2019). RtI: Controversies and solutions. In P. C. Pullen & M. M. Kennedy (Eds.), *Handbook of response to intervention and multi-tiered systems of support* (pp. 11-25). Taylor & Francis.
- Kauffman, J. M., Badar, J., Wiley, A. L., Anastasiou, D., & Koran, J. (2022, August 18). Uncertainty in education: Policy implications. *Journal of Education*.
<http://dx.doi.org/10.1177/00220574221090283>
- Kauffman, J. M., Burke, M. C., & Anastasiou, D. (2022, August 18). Hard LRE choices in the era of inclusion: Rights and their implications. *Journal of Disability Policy Studies*.
<http://dx.doi.org/10.1177/10442073221113074>
- Kauffman, J. M., & Farkas, G. (2022). Veracity in special education. *Exceptionality*, 30, 43-56.
<https://doi.org/10.1080/09362835.2021.1938066>.

- Kauffman, J. M., Hallahan, D. P., Pullen, P. C., & Badar, J. (2018). *Special education: What it is and why we need it*. Routledge.
- Kauffman, J. M., & Sasso, G. M. (2006). Toward ending cultural and cognitive relativism in special education. *Exceptionality, 14*, 65-90.
http://dx.doi.org/10.1207/s15327035ex1402_2
- King, M. L. Jr. (1963/2012). *A gift of love: Sermons from strength to love and other preachings*. Bea King, M. L. Jr. (1963/2012). *A gift of love: Sermons from strength to love and other preachings*. Beacon Press.
- Lane, K. L., Buckman, M. M. Oakes, W. P., & Menzies, H. (2020). Tiered systems and inclusion: Potential benefits, clarifications, and considerations. In Kauffman, J. M. (Ed.), *On educational inclusion: Meanings, history, issues and international perspectives* (pp. 85–106). Routledge.
- Latour, B., & Woolgar S. (1986). *Laboratory life: The social construction of scientific facts*. Princeton University Press.
- Latour, B. (1988). *Pasteurization of France*. Harvard University Press.
- Levins, R. & Lewontin, R. (1985). *The dialectical biologist*. Harvard University Press.
- Lewontin, R. (1992). *The doctrine of DNA: Biology as ideology*. Penguin.
- Linton, S. (2006). *My body politic: A memoir*. University of Michigan Press.
- McIntyre, L. (2019). *The scientific attitude: Defending science from denial, fraud, and pseudoscience*. The MIT Press.
- Martin, E. W. Jr. (2013). *Breakthrough: Federal special education legislation 1965-1981*. Bardolf.

Merton, R. K. (1973). *The sociology of science: Theoretical and empirical investigations*.

University of Chicago Press.

Milanovic, B. (2023, March 19). Living in own ideology. *Global inequality and more 3.0*.

<https://branko2f7.substack.com/p/living-in-own-ideology>

Morgan, P. L., Farkas, G., Cook, M., Strassfeld, N. M., Hillemeier, M. M., Pun, W. H., &

Schussler, D. L. (2017a). Are Black children disproportionately overrepresented in special education? A best-evidence synthesis. *Exceptional Children, 83*, 181–198.

Morgan, P. L., Farkas, G., Hillemeier, M. M., & Maczuga, S. (2017b). Replicated evidence of

racial and ethnic disparities in disability identification in U.S. schools. *Educational Researcher, 46*, 305–322.

Neiman, S. (2023). *Left is not woke*. Polity Press.

Niiniluoto, I. (1999). *Critical scientific realism*. Oxford University Press.

Oliver, M. (2000, July). *Decoupling education policy from the economy in late capitalist*

societies: Some implications for special education. Keynote address at the International Special Education Congress, Manchester, England.

Putnam, H. (1981). *Reason, truth and history*. Cambridge University Press.

Psillos, S. (1999). *Scientific realism: How science tracks truth*. Routledge.

Psillos, S. (2007). *Philosophy of science A–Z*. Edinburgh University Press.

Psillos, S. (2017). Scientific realism and the mind-independence of the world. In E. Agazzi (Ed.),

Varieties of scientific realism: Objectivity and truth in science (pp. 209–226).

http://dx.doi.org/10.1007/978-3-319-51608-0_11

- Pullen, P. C. (2022). Meeting instructional needs: Delivery of evidence-based special instruction. In J. M. Kauffman (Ed.), *Revitalizing special education: Revolution, devolution, and evolution* (93-107). Emerald.
- Pullen, P. C. & Hallahan, D. P. (2015). What is special education instruction? In B. Bateman, J. W. Lloyd, & M. Tankersley (Eds.), *Enduring issues in special education: Personal perspectives* (pp. 37–50). New York, NY: Routledge
- Rawls, J. (1971). *A theory of justice*. Oxford University Press.
- Rodriguez, J. A., & Murawski, W. W. (Eds.). (2022). *Special education law and policy: From foundation to application*. Plural Publishing.
- Rufo, J. M., & Causton, J. (2022). *Reimagining special education: Using inclusion as a framework to build equity and support all students*. Brookes.
- Sahlberg, P. (2021). *Finnish lessons 3.0: What can the world learn from educational change in Finland?* (3rd ed.). Teachers College Press.
- Sailor, W., Skrtic, T. M., Cohn, M., & Olmstead, C. (2021). Preparing teacher educators for statewide scale-up of multi-tiered system of support (MTSS). *Teacher Education and Special Education*, 44(1), 24-41. <http://dx.doi.org/10.1177/0888406420938035>
- Sandel, M. J. (2009). *Justice: What's the right thing to do?* Farrar, Strauss and Giroux.
- Sellars, W. (1963/1991). *Science, perception and reality*. Ridgeview.
- Slee, R. (2011). *The irregular school: Exclusion, schooling and inclusive education*. Routledge.
- Slee, R. (2018). *Inclusive education isn't dead, it just smells funny*. Routledge.
- Slee, R. (2020). *Defining the scope of inclusive education*. Think piece prepared for the 2020 Global Education Monitoring Report, Inclusion and Education. <https://www.researchgate.net/publication/330741940>.

- Smith, G. (2023). *Distrust: Big data, data torturing, and the assault on science*. Oxford University Press.
- Stainback, W., & Stainback, S. (1991). A rationale for integration and restructuring: A synopsis. In J. W. Lloyd, N. N. Singh, & A. C. Repp (Eds.), *The Regular Education Initiative: Alternative perspectives on concepts, issues, and models* (pp. 226–239). Sycamore.
- Suggate, S. P. (2016). A meta-analysis of the long-term effects of phonemic awareness, phonics, fluency, and reading comprehension interventions. *Journal of Learning Disabilities*, 49(1), 77-96. <https://doi.org/10.1177/0022219414528540>
- SWIFT Schools (2023). <https://swiftschools.org>.
- Terzi, L. (2010). Justice and equality in education. A capability perspective on disability and special educational needs. Routledge.
- Thorius, K. A. K. (2019). Facilitating en/counters with special education's cloak of benevolence in professional learning to eliminate racial disproportionality in special education. *International Journal of Qualitative Studies in Education*, 32(3), 323–340. <https://doi.org/10.1080/09518398.2019.1576945>
- U.S. Code [U.S.C.] 20 § 1401 et seq.
- U.S. Department of Education. (2022). *43rd Annual report to Congress on the implementation of the Individuals with Disabilities Education Act, 2004*. Author.
- Warnock, M. (2005). *Special educational needs: A new look. Impact No. 11*. Philosophy of Education Society of Great Britain.
- Weber, M. (1949). *The methodology of the social sciences* (Translated and edited by E. A. Shus & H. A. Finch). The Free Press.
- Weintraub, F. J., & Abeson, A. (1974). New education policies for the handicapped: The quiet revolution. *The Phi Delta Kappan*, 55(8), 526-529, 569.

- Wiley, A. L., David, D., & Harker, B. (in press). Multi-tiered systems of support in special education reform: A critical appraisal. In J. M. Kauffman, D. P. Hallahan, & P. C. Pullen (Eds.), *Handbook of special education* (3rd ed.). Routledge.
- Wiley, A. L., Harker, B. A., & McCollum, T. (2022). Veil of tiers or happy tiers? Multi-tiered systems of support. In J. M. Kauffman (Ed.), *Revitalizing special education: Revolution, devolution, and evolution* (pp. 121-141). Emerald.
- World Health Organization. (2011). *World report on disability*. Author.
- Yell, M. L. (2019). *The law and special education* (5th ed.). Pearson.
- Yell, M L., & Prince, A. T. (2022). Why the continuum of alternative placements is essential. In J. M. Kauffman (Ed.), *Revitalizing special education: Revolution, devolution, and evolution* (pp. 59-78). Emerald.