

Deserts by Design:
Accountability Architecture, Manufactured Hermeneutical Injustice, and the Vanishing
Curriculum in Segregated Special Education

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ABSTRACT

Students in segregated special education classrooms in the United States routinely receive instruction in two subjects, reading and mathematics, while science, history, civics, and social studies disappear from their school day entirely. This paper argues that the disappearance is a designed outcome of federal and state accountability architecture rather than a pedagogical judgment about what these students can learn. Test based accountability counts performance in reading and mathematics; subjects that are not counted are triaged out of the instructional day, and the triage falls hardest on self-contained programs whose institutional standing depends on tested subject scores. The paper names the resulting condition a curriculum desert and analyzes it through an extension of Fricker's concept of hermeneutical injustice: where Fricker describes gaps in collective interpretive resources that disadvantage a group, the curriculum desert is a manufactured gap, produced by an identifiable administrative design, in a specifiable population, on a knowable schedule. The subject most reliably deleted, civics, is the subject through which a student would learn the legal protections that govern his own education, so the design manufactures a class of people structurally prevented from recognizing their own situation. The paper then documents that the deletion cannot be defended on feasibility grounds: states publish alternate academic achievement standards for the deleted subjects, peer reviewed research demonstrates engagement effective delivery methods at consumer prices, and informal instruction by untrained caregivers produces measurable content knowledge in the affected population. A concluding section sketches the policy implication: a public investment in accessible curriculum delivery whose per student cost rounds to a fraction of one percent of existing annual special education spending.

Keywords: special education, curriculum narrowing, accountability policy, hermeneutical injustice, epistemic injustice, self-contained classrooms, game based learning, disability rights, ESSA, IDEA

I. INTRODUCTION

A student in a self-contained special education classroom in a midwestern public school can name most of the presidents of the United States. He can describe the difference between a noun and a pronoun. He can situate the Second World War in time and explain, in his own register, why it happened. None of this knowledge came from his school. The presidents came from a chart on a wall at home. The grammar came from a parent. The war came from commercial video games whose developers built historically grounded worlds for entertainment. His school, during the same years, delivered instruction in exactly two subjects: reading and mathematics. There was no science block, no history block, no civics block, and no social studies block, not as a temporary scheduling artifact but as the permanent shape of the program.

This paper is about why that shape exists, what it does to the people inside it, and why the standard explanations for it fail. The shape is not unique to one classroom or one district. It is the predictable output of an accountability architecture that has governed American public education since 2002, an architecture that counts performance in some subjects and not others and thereby instructs every rational administrator which subjects may be allowed to vanish. The students for whom the vanishing is most complete are the students in segregated special education settings, because those settings sit at the point of maximum institutional pressure: their continued existence, staffing, and standing within a district are tied most tightly to the tested subject scores of the students inside them.

Three claims organize the argument. First, the curriculum desert, defined here as the durable absence of entire academic subjects from a student population's instructional day, is a designed outcome in the specific sense that it follows foreseeably from the incentive structure of test based accountability, even though no actor at any level intends it. Second, the desert constitutes a form of epistemic harm that existing vocabulary does not quite capture. Fricker (2007) gave the name hermeneutical injustice to the condition in which a group lacks the interpretive resources to make sense of its own social experience because those resources were never made available to it. The curriculum desert is hermeneutical injustice with an added property: the gap is manufactured. It is produced by an identifiable administrative design, in a specifiable population, on a knowable schedule, and the subject most reliably deleted, civics, is precisely the subject through which a member of the affected class would come to understand the legal protections that govern his own education. Third, the desert cannot be defended on the ground that the deleted content is unteachable to this population or unaffordable to deliver. The states' own published alternate academic achievement standards concede teachability; peer reviewed research on commercial educational game modes demonstrates engagement effective delivery at consumer prices; and the informal record of caregiver instruction, including the case that opens this paper, demonstrates that the affected students learn the deleted content when anyone attempts to teach it.

The paper proceeds as follows. Section II reconstructs the accountability architecture and the mechanism by which it narrows curriculum, drawing on two decades of research on instructional time reallocation under test based accountability. Section III defines the curriculum desert and explains why segregated settings experience the most complete form of it, including the internal contradiction by which states publish standards for subjects their incentive systems ensure are never taught. Section IV develops the concept of manufactured hermeneutical injustice and its recursive structure. Section V analyzes the perceptual mechanism that keeps the desert invisible, a miscalibration in how observers infer need from the visibility of disability, and discloses the author's position with respect to the subject matter. Section VI assembles the feasibility evidence: the demonstrated paths by which the deleted content has already been delivered to this population, formally and informally. Section VII states the policy implication and prices it. Section VIII notes limitations. Section IX concludes.

Two scope notes. This paper is an analytic and conceptual contribution informed by the author's position, in the manner of positioned scholarship in disability studies; it is a hybrid of conceptual argument and illustrative case material, and it does not present itself as an autoethnography or as a systematic empirical study. The systemic claims

rest on public statutes, public regulations, published research, and publicly verifiable facts about accountability design. The personal material is offered as illustration of mechanism and as an existence proof on questions of feasibility, never as the evidentiary base for the systemic claims. Second, this paper deliberately brackets the legal analysis. Whether the curriculum desert violates Title II of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act, and the litigation architecture for testing that question, is beyond this paper's scope.

II. THE ACCOUNTABILITY ARCHITECTURE

A. What the Law Counts

The No Child Left Behind Act of 2001 conditioned federal Title I funds on annual statewide assessment of every student in reading and mathematics in grades three through eight and once in high school, with science assessed once in each of three grade spans (No Child Left Behind Act, 2002). The Every Student Succeeds Act of 2015 retained the same assessment skeleton: states must maintain academic standards and aligned annual assessments in reading or language arts, mathematics, and science, and must operate accountability systems built principally on achievement and growth in reading and mathematics, English language proficiency, and graduation rates (20 U.S.C. § 6311). History is absent from the federally mandated assessment list. Civics is absent. Social studies is absent. Geography is absent.

The omission is not an oversight about what an education contains. The Every Student Succeeds Act itself defines a well rounded education to include, by name, civics and government, history, geography, science, and a list of further subjects (20 U.S.C. § 7801(52)). The statute therefore contains, in the same enactment, a definition of the education every student is supposed to receive and an accountability mechanism that measures a small subset of it. The gap between the definition and the measurement is the space in which the curriculum desert forms.

B. The Reallocation Mechanism

What gets measured gets taught is not a slogan in this literature; it is a repeatedly documented reallocation of instructional minutes. A metasynthesis of forty-nine qualitative studies found the primary effect of high stakes testing to be the narrowing of curricular content to tested subjects, the fragmentation of subject area knowledge into test related pieces, and an increase in teacher centered pedagogy (Au, 2007). National survey research has documented the marginalization of elementary social studies specifically under testing and standardization pressure (Fitchett and Heafner, 2010). In the years following No Child Left Behind implementation, a national district survey found that sixty-two percent of districts increased elementary instructional time in English language arts or mathematics and that forty-four percent cut elementary time in science, social studies, art and music, physical education, lunch, or recess to fund the increase (McMurrer, 2007). The reductions were largest in districts under improvement pressure, which is to say in districts whose tested subject scores were lowest, which is to say in districts serving the highest concentrations of poverty, English learners, and students with disabilities.

The mechanism requires no malice and no instruction from above. A district whose ratings, interventions, and reputational standing depend on reading and mathematics scores behaves rationally when it converts an untested hour into a tested one. A principal whose school sits one performance band above state intervention behaves rationally when the master schedule trades a social studies block for a second reading block. Each conversion is locally defensible. The aggregate result is that the subjects the statute names as components of a well rounded education are delivered in inverse proportion to a school's accountability pressure, and accountability pressure concentrates exactly where the students with the least power to object are concentrated.

C. The Population Under Maximum Pressure

Students with disabilities occupy a distinctive position inside this machine. Their assessment participation is federally mandated; their scores count; and for the subset with the most significant cognitive disabilities, a parallel apparatus of alternate assessments based on alternate academic achievement standards exists, capped in participation at one percent of all tested students per subject (20 U.S.C. § 6311(b)(2)(D)). A self-contained program is therefore not exempt from the accountability machine. It is a unit whose tested subject performance is visible to the district, and whose institutional justification, in budget meetings and program reviews, is articulated largely in terms of the reading and mathematics growth of its students.

This positioning predicts the observed schedule. Where a general education student under accountability pressure loses some social studies minutes, a student in a self-contained program loses the subject. The program's day is finite, its staffing is thin, its students' tested subject deficits are by definition large, and every incentive that reaches the program rewards the conversion of the entire day into remediation of the two counted subjects. The general education building keeps a diminished science strand because its master schedule still contains one. The self-contained room's master schedule, in the cases that motivated this paper and in the pattern documented in practitioner literature, contains reading, mathematics, functional and life skills blocks, and nothing else. The desert is not a thinner version of the general education narrowing. It is the completed form of it.

III. THE CURRICULUM DESERT

A. Definition

A curriculum desert is the durable absence of entire academic subjects from a student population's delivered instruction, where the absence is produced by resource and incentive allocation rather than by an individualized educational determination, and where the affected population has no practical means of detecting or contesting the absence. Each element matters. Durable distinguishes the desert from scheduling fluctuation. Entire subjects distinguishes it from reduced minutes. Produced by allocation rather than individualized determination distinguishes it from the legitimate operation of individualized education planning, in which a team could in principle conclude that a particular student's needs require an unusual concentration of instructional time; the desert precedes and preempts any such determination, because no team can individualize access to a subject that does not exist in the building. No practical means of detection distinguishes the desert from harms the affected population can name; Section IV develops this element.

B. The Standards Paradox

The most efficient refutation of the desert's implicit justification is found in the states' own publications. Under the alternate assessment provisions of federal law, states adopting alternate academic achievement standards for students with the most significant cognitive disabilities must align those standards with the state's general academic content standards and must promote access to the general curriculum (20 U.S.C. § 6311(b)(1)(E); 34 C.F.R. § 200.1). Every state maintains an alternate assessment aligned to alternate academic achievement standards in reading, mathematics, and science, and some states additionally maintain one in social studies (National Center on Educational Outcomes, n.d.).

The publication is a feasibility concession of the most formal kind. A state that writes, adopts, and publishes a standard describing what a student with the most significant cognitive disabilities should know in social studies has committed itself, in an official instrument, to the proposition that social studies is teachable to that student. The same state's accountability design then ensures that the subject the standard governs is never delivered to him, because the

design rewards the conversion of his instructional day into the two counted subjects. The left hand documents feasibility. The right hand guarantees nondelivery. No actor experiences the contradiction, because the standards office and the accountability office are different offices, the documents are different documents, and the student who lives inside the contradiction is, for reasons Section IV explains, the person least equipped to file the complaint.

The contradiction is visible, in fragments, to the federal monitoring apparatus itself. The National Center on Educational Outcomes, the federally funded center that tracks alternate assessment, warns in its monitoring reports that the instruction of students assessed on the alternate track may be “reduced in depth, breadth, or complexity,” with implications for graduation and post-secondary options (Hinkle, Thurlow, Lazarus, and Strunk, 2022), and its analyses find that states placing higher percentages of students in more restrictive environments also assess higher percentages of students on the alternate track (Lazarus and Quanbeck, 2023). The population in the most segregated rooms and the population whose instructional depth the monitoring center worries about are, to a first approximation, the same population.

C. Harm Without a Villain

It is essential to the analysis, and to its eventual remedy, that the desert is nobody’s intention. The federal drafters intended to concentrate attention on foundational skills. The state accountability designers intended to comply with federal conditions and to direct improvement pressure where scores were lowest. The district administrators intended to protect their schools from intervention. The principals intended to protect their programs. The special educators inside the rooms, who are routinely among the most committed professionals in a building, intended to deliver the remediation the system asked of them. The deletion of history from a child’s education is the cascade, the downstream effect that was invisible at every design table because no design table contained anyone whose job was to ask what the incentive would do to the smallest, least visible unit in the system. The practical consequence of the no villain structure is that moral argument addressed to individual actors will not dissolve the desert, because every individual actor is behaving defensibly. Only a change to the design, or an external obligation that overrides the design’s incentives, can.

IV. MANUFACTURED HERMENEUTICAL INJUSTICE

A. Fricker’s Concept

Fricker (2007) distinguished two forms of epistemic injustice. Testimonial injustice occurs when prejudice deflates the credibility a hearer assigns to a speaker. Hermeneutical injustice occurs at a prior stage: a structural gap in the collective interpretive resources leaves a group unable to make adequate sense of its own social experience, because the concepts that would render the experience intelligible were never developed or never made available to the group. Fricker’s central illustration is the position of women experiencing what would later be called sexual harassment before the concept existed: the experience was real, the harm was real, and the conceptual resources for naming it, contesting it, and organizing against it were absent from the shared vocabulary.

In Fricker’s account the gap is typically a byproduct of unequal participation in the practices through which collective meanings are generated. Marginalized groups are underrepresented in journalism, scholarship, law, and politics; the concepts those practices generate therefore track the experiences of the represented; and the gap in the conceptual repertoire falls where the underrepresentation falls. The injustice is structural, distributed, and in the standard case nobody manufactures it. It accretes.

B. The Manufactured Variant

The curriculum desert presents a variant that Fricker's account did not need to anticipate, because her cases involve concepts that did not yet exist anywhere. The concepts deleted by the desert exist. They are mature, codified, and taught down the hall. The Americans with Disabilities Act is in the textbook the general education civics class uses. The history of the disability rights movement, of institutionalization and deinstitutionalization, of the statutes that govern the affected student's own individualized education program, is part of the well rounded education the federal statute defines. The interpretive resources are not missing from the collective repertoire. They are withheld from a specifiable population by an identifiable administrative design, on a schedule that can be read off a master schedule document.

This is hermeneutical injustice in its manufactured form: a gap in a group's interpretive resources that is produced, maintained, and continuously regenerated by the operation of a designed system, where the design is documentable, the affected class is enumerable, and the deletion is, in principle, reversible by an administrative decision. The distinction matters for two reasons. Analytically, it relocates the injustice from the diffuse zone of cultural accretion to the tractable zone of institutional design, which means it can be audited, attributed, and remedied in ways that accreted gaps cannot. Morally, it raises the culpability ceiling: an accreted gap supports at most a charge of collective negligence, while a manufactured gap that persists after it has been documented supports a charge of maintenance, the knowing continuation of a design whose effects are no longer invisible to its operators.

C. The Recursive Structure

The desert's most distinctive property is recursive. Among the subjects the accountability design deletes, civics occupies a special position, because civics is the subject through which a student would acquire the concepts needed to recognize the deletion as a wrong. A student who has never encountered the idea of a legal right, of a statute that constrains his school, of a complaint procedure, of the specific enactments that govern his own educational program, does not experience the desert as a violation. He experiences it as the way school is. The design therefore manufactures not only the gap but the inability to perceive the gap, and it concentrates that double effect on the population whose other characteristics, including communication related disabilities, already impose the highest barriers to self report.

The recursive structure explains the desert's stability. Harms that their victims can name generate complaints, complaints generate records, records generate litigation and journalism and reform. The desert generates almost none of these, because its victims have been structurally deprived of the naming resources, their families typically discover the deletion only by accident, and the institutional actors surrounding the desert each see only the locally defensible decision in front of them. A system that wished to make a harm permanent could do no better than to arrange for the harm to delete the concepts required to report it. No system wished this. The design achieved it anyway, which is the precise sense in which the injustice is manufactured rather than merely suffered.

V. THE VISIBILITY MISCALIBRATION

A. Two Failure Modes, One Root

Disability discrimination is often modeled as a single phenomenon that varies in degree. The curriculum desert is easier to see when discrimination is modeled instead as two opposite failure modes sharing one root: observers calibrate a disabled person's needs by the visibility of the disability rather than by the needs themselves.

At the low visibility end, the failure mode is denial of accommodation. A person whose disability is invisible, the executive function impairments of attention deficit hyperactivity disorder and autism in their less apparent presentations, presents accommodation requests that strike observers as unnecessary because the need cannot be seen.

The accommodations are frequently small to the point of appearing trivial from outside, and their triviality is held against them: a person who needs so little, the inference runs, must not really need it. The literature on disclosure costs and accommodation denial for invisible disabilities documents the pattern extensively: disclosure is the gateway to accommodation yet carries real risk, a substantial share of workers who disclose report lasting negative consequences, and the law's accommodation machinery presupposes a visibility that these conditions do not supply (Santuzzi, Waltz, Finkelstein, and Rupp, 2014; von Schrader, Malzer, and Bruyère, 2014; Prince, 2017).

At the high visibility end, the failure mode inverts. A person whose disability is severe enough to dominate perception stops being seen as a person with needs and becomes, to the institutional eye, the disability itself. The needs that get serviced are the ones the disability announces; everything else about the person, including the ordinary human entitlement to learn what happened in the world before he arrived in it, drops out of the institutional model. The hypervisible student is not denied accommodations. He is denied the parts of personhood the accommodations were supposed to serve. A diagnosis does not take history class, and once the institution sees only the diagnosis, nobody in the building experiences the empty schedule as a deprivation.

The two failure modes are usually studied separately, by different literatures, as though they were different injustices. They are one miscalibration expressed at two ends of a spectrum, and the population in segregated settings sits at the end where the miscalibration deletes not accommodations but curriculum.

B. A Note on Position

The author is positioned at both ends of the spectrum just described, and the reader is entitled to know it. The author is diagnosed with autism spectrum disorder, attention deficit hyperactivity disorder, and generalized anxiety disorder, and uses assistive technology, disclosed in the Acknowledgments, as an accommodation in professional work. The accommodations involved are of the kind that look trivial from outside and are routinely contested for exactly that reason. The author is also the parent of a son with significant cognitive and developmental disabilities who is educated in a self-contained special education program of the kind this paper analyzes, and who, before entering that program, was homeschooled by the author for an extended period. During that period the author functioned as the deliverer of instruction, the role ordinarily held by credentialed educators, to a student at the high support end of the needs spectrum.

The homeschool record supplies the case material in the opening paragraph and one finding worth stating with its limitation attached. The instruction the author delivered was, by the author's own assessment, insufficient; the decision to enroll the son in the public program reflected that insufficiency. The finding is therefore a fortiori in form: an untrained, disabled, overwhelmed caregiver, delivering admittedly inadequate instruction through wall charts, conversation, and commercial video games, nonetheless produced measurable content knowledge in history and grammar that the credentialed public program, during the same developmental window, did not attempt to produce at all. The comparison sets a floor, and the floor matters precisely because the home instruction was weak. If the deleted subjects were unteachable to this student, the weak attempt would have failed. It did not fail. What the comparison says about the institution is the subject of this paper; what it establishes evidentially is narrow and should be stated narrowly: one student at the high support end of the spectrum demonstrably learned deleted content when an amateur attempted to teach it, which is an existence proof on feasibility for that student and an illustration of mechanism for the class. The systemic claims of this paper do not rest on it.

One further disclosure bears on the argument of Section VI. The position from which this paper is written rejects both poles of the placement debate that has organized disability education advocacy for decades. The author regards segregated settings as genuinely necessary for a subset of students whose support needs cannot be met in general education classrooms, including students in his son's program, and simultaneously regards the curriculum those settings deliver as indefensible. The two judgments are compatible, and their compatibility is the paper's quiet structural

premise: placement and curriculum are independent variables, and a literature that treats them as one variable will keep producing reform proposals that fix the wrong one.

VI. THE DEMONSTRATED PATH

A. The Compatibility Premise

The placement debate's two camps share an unexamined assumption. Inclusion advocates argue that segregated settings are inherently harmful and that the remedy for their failures is dissolution into general education. Defenders of the placement continuum argue that some students' needs require specialized settings. Both camps argue about where students should sit, and both treat the quality of what is taught as a dependent variable of the placement decision. The historical record cuts against the assumption from both directions. Segregated settings have repeatedly degraded into custodial environments, which is the inclusion camp's genuine evidence; and inclusion implemented by budget officers has repeatedly meant placement in general education classrooms with the specialized supports removed, the pattern criticized in the special education literature of the 1980s and 1990s as dumping, in warnings that integration driven by cost reduction would strip identifiable resources from identifiable students (Kauffman, Gerber, and Semmel, 1988; Kauffman, 1989), in the field's own account of the inclusion movement's radicalization (Fuchs and Fuchs, 1994), and in case research on the meaning and practice of inclusion as implemented (Baker and Zigmond, 1995), which is the continuum camp's genuine evidence. Each camp's evidence documents a curriculum and support failure, and each camp's remedy moves students between rooms without obligating anyone to teach the missing subjects in either room.

The premise of this section is the one stated at the close of Section V: presuming competence and providing intensive support are compatible commitments, and the operative question is never which room but whether the full curriculum, adapted as deeply as adaptation must go, is delivered in whatever room the student's needs require. Federal law frames the question the same way: every individualized program must describe the child's involvement and progress in the general education curriculum, and the program must be appropriately ambitious in light of the child's circumstances, with every child given the chance to meet challenging objectives (*Endrew F. v. Douglas County School District RE-1*, 2017). The question then becomes empirical. Can the deleted subjects be delivered, engagingly and at tolerable cost, to students at the high support end of the spectrum? The answer is already documented in three independent registers.

B. The Commercial Register: Discovery Tour

Between 2018 and 2021 Ubisoft released three Discovery Tour modes built on the world simulations of its Assassin's Creed series: Ancient Egypt (2018), Ancient Greece (2019), and the Viking Age (2021). The modes strip the parent games' combat and mission structure and convert the simulated historical worlds into guided, curated educational environments developed with historians and educators (Rochat, 2022). The Egypt mode shipped in February 2018 as a free update for owners of the parent game and as a standalone title at \$19.99 (Ubisoft, 2018), and Ubisoft made the Egypt and Greece standalones free to download and keep for one week in May 2020 to support instruction during the pandemic school closures (Bonifacic, 2020). A peer reviewed scholarship has grown around the modes, including a book length treatment of the series' pedagogical uses by education researchers at the Université de Montréal (Éthier and Lefrançois, 2023), a dedicated analysis of the Discovery Tour as a mediated tool for teaching and learning history (Péloquin and Éthier, 2023), classroom implementation research using Odyssey and its Discovery Tour in advanced secondary coursework (Oulitskaia, 2024), and critical appraisals in the archaeology of games literature documenting reported school adoption of the Egypt tour (Politopoulos, Mol, Boom, and Ariese, 2019).

Two features of this register matter for the present argument. First, the delivery mode was engineered for

engagement by an industry whose economic survival depends on holding attention, which is to say it was engineered, without intending to be, for exactly the engagement profile that characterizes many students in segregated settings, including students for whom text first instruction is the least accessible format. The case material in this paper's opening paragraph is an instance: the student's functional knowledge of the Second World War and of classical antiquity was acquired substantially through historically grounded commercial game worlds, before any researcher had told his caregiver that the literature predicted he could. Second, the register establishes the cost order of magnitude. Engagement engineered, historian curated, peer review evaluated delivery of historical content exists, today, at the price of a restaurant meal per seat.

C. The Civic Register: iCivics

In 2009 retired Supreme Court Justice Sandra Day O'Connor founded iCivics, a nonprofit producing free civics focused video games for classroom use, out of a concern its official history records plainly: too few Americans understood the purpose and role of the country's courts and political institutions (iCivics, n.d.). The organization reports that its free resources now reach one hundred forty-five thousand teachers and nine million students across all fifty states (iCivics, n.d.). The register matters for two reasons. The displacement of civics and social studies under accountability pressure is independently documented in the research literature (Fitchett and Heafner, 2010), so the deficit this intervention answered is neither speculative nor fringe. And the response chosen, building games, anticipates the feasibility argument: when an institution as conventional as a retired Justice's nonprofit set out to rescue a displaced subject, the delivery vehicle it reached for was the one this section documents, and the organization today describes itself as the nation's leading provider of civic education.

D. The Public Register: Government as Media Producer

The remaining objection is that producing or procuring such delivery at public expense would be a category novelty, government doing something governments do not do. The objection fails on the record. The United States Army developed and distributed America's Army, a purpose built video game, released free of charge on July 4, 2002 and maintained as a recruitment and strategic communication instrument for two decades until its 2022 retirement (Encyclopaedia Britannica, n.d.). The Department of Education funded educational media production for children for more than three decades through the Ready To Learn grant program, created in 1992 and operated through the Corporation for Public Broadcasting and PBS. The National Science Foundation and the Institute of Education Sciences fund educational and serious game development through standing grant mechanisms. Title IV, Part A of the Every Student Succeeds Act states its purpose, by name, as providing all students with access to a well rounded education and improving the use of technology (20 U.S.C. § 7111). The federal government already produces games when it wants soldiers, already funds children's educational media when it wants literacy, and already operates a grant line whose statutory purpose names the displaced subjects. The category objection has no instance to stand on.

VII. THE POLICY IMPLICATION AND ITS PRICE

A. The Proposal in One Sentence

The affirmative implication of Sections II through VI is a public investment, through existing grant vehicles, in the development or licensing and the classroom delivery of engagement engineered curriculum modes covering the displaced subjects, science, history, civics, geography, designed to be accessible to students across the support needs spectrum and deployed first in the segregated settings where the displacement is most complete.

B. The Arithmetic

The Individuals with Disabilities Education Act served seven and a half million children and youth ages three through twenty-one in school year 2022–23, fifteen percent of public school enrollment (National Center for Education Statistics, 2024). Take the most hostile available cost assumption: charge the entire development budget of a contemporary flagship commercial title, on the order of one hundred million dollars, to the education ledger, although the actual marginal cost of a Discovery Tour style mode is a fraction of a parent title’s budget and the demonstrated retail price of the existing product is twenty dollars. One hundred million dollars across seven and a half million students is thirteen dollars and thirty-three cents per student, one time. Scale the assumption to a moonshot: a one billion dollar program, sufficient on the hostile assumption for content spanning many historical eras and multiple subjects, prices at roughly one hundred thirty-three dollars per student, one time.

Include the hardware honestly rather than excluding it. Self-contained classrooms do not require one device per student; they require classroom stations. Federal data place thirteen percent of students served under the Act, roughly one million children, in settings where they spend less than forty percent of the school day in general classes (National Center for Education Statistics, n.d.-a). On the hostile assumptions of five hundred dollars per station, five stations per room, and one room for every ten such students, the delivery hardware prices at roughly two hundred fifty million dollars, and quadrupling the room stock to cover resource settings and part time placements still does not push the hardware total past the moonshot software figure. The console industry’s longstanding economics, in which hardware is sold near cost because lifetime software value dominates it, indicate that public procurement at scale would price below the consumer hostile assumption, not above it. The fully loaded moonshot, software and hardware together, remains in the low hundreds of dollars per affected student, one time.

The comparator is annual. Every national expenditure study conducted has placed spending per special education student on the order of twice spending per general education student, most recently 1.9 times in the 1999–2000 study, with earlier studies as high as 2.28 (Chambers, Parrish, and Harr, 2004); applied to current expenditures per pupil of \$16,280 in 2020–21 (National Center for Education Statistics, n.d.-b), the ratio places annual public expenditure per special education student in the low tens of thousands of dollars. The fully loaded one time moonshot is therefore on the order of one percent of a single year’s existing per student expenditure, and the realistic program, built on licensing and marginal cost development rather than hostile assumptions, is on the order of one tenth of one percent. These are the magnitudes against which any cost objection must be stated, and stating a cost objection at these magnitudes is the act this paper predicts no official will perform in public once the magnitudes are on the table.

C. The Baseline Is Not Free

Every cost objection to the proposal silently compares it against zero, as though zero were free. Zero is not free. The do nothing baseline is the continued production of cohorts of citizens stripped of science, history, and civics, carrying the lifetime consequences of manufactured hermeneutical injustice: reduced capacity to navigate civic and legal systems, reduced capacity to recognize and contest violations of their own statutory rights, and the downstream public costs of both. None of those costs appears in an education budget line, because they are slow, distributed, and unattributed, which is the standard signature of harms that accountability systems are blind to. The honest comparison was never the program against nothing. It is the program against the compounding cost of the desert, paid indefinitely by the people least able to invoice anyone for it.

D. The Burden of Justification

Sections V and VI shifted the evidentiary burden, and the shift should be stated plainly. The literature is published. The commercial product shipped and was peer review evaluated. The civic nonprofit scaled. The informal caregiver record replicates the finding at the high support end of the spectrum. The delivery price is a rounding error against existing expenditure, and the statutory grant vehicle already exists. The proposal does not carry the burden of proving that the path works. The public authority carries the burden of explaining why, with a demonstrated path and a trivial price, it continues to choose the desert. The author is not aware of any articulated justification on the record, and Section IV explains why none has been demanded: the constituency that would demand it has been structurally deprived of the concepts required to do so.

VIII. LIMITATIONS

The paper's limitations are stated rather than buried. The case material is one student, one household, one program; it functions as illustration and as a single feasibility existence proof, and the paper's systemic claims rest on the public architecture documented in Sections II and III, not on the case. The national prevalence and depth of the curriculum desert in segregated settings is asserted here on the basis of the incentive analysis, the post 2002 narrowing literature, and practitioner documentation; a systematic empirical inventory, built from public records requests for master schedules and instructional minute allocations across districts, is the natural next study and is in design. The peer reviewed anchors in Sections II and VI were verified against bibliographic databases, and the government data, industry facts, and grey literature claims were verified in this revision against issuing sources, archived primary pages, and bylined reporting; the disclosure and inclusion implementation literatures were anchored to verified peer reviewed sources, and no bracketed placeholders remain. The concept of manufactured hermeneutical injustice is offered as an extension of Fricker (2007) and would benefit from engagement by philosophers of epistemic injustice; the author's claim is that the curriculum desert instantiates the manufactured variant, not that the variant's full conceptual geography is mapped here.

The legal analysis is deliberately absent. Whether the curriculum desert is actionable, by whom, against which public entity, under which theory, and toward which remedy is a question this paper supplies the factual predicate for and does not attempt to answer.

IX. CONCLUSION

A student in a self-contained classroom knows the presidents because of a chart at home and knows the Second World War because of a game. His school taught him neither, and his school's silence was not a judgment about him. It was the output of a design: an accountability architecture that counts two subjects, a triage logic that rationally deletes the uncounted ones, and a deletion that completes itself in the rooms holding the students with the least power to name what is happening to them. The deleted subjects include the one that would have given them the name.

This paper has argued that the condition deserves its own vocabulary, the curriculum desert, and its own place in the theory of epistemic injustice, as the manufactured variant of Fricker's hermeneutical gap: produced by an identifiable design, in an enumerable population, on a documentable schedule, with a recursive structure that deletes the conceptual tools required to report the deletion. It has argued that the condition cannot be defended on feasibility or cost grounds that survive contact with the states' own alternate standards, the published research, the commercial record, the civic record, the public production record, or the arithmetic. And it has located the only honest remaining question, which is not whether the path exists or what it costs, but why a public authority with a demonstrated path and a trivial price continues to choose the desert for the children least able to ask.

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