

# Go Fish: Data Without Direction, Too Little Too Late, Fidelity First or Failure Follows – The Myth of Interventions

Denise S. Lynch

PhD, Bilingual Education Administrator, Multilingualist and Whole Child Advocate, United States

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## ABSTRACT

This study examined the extent to which Coordinated Early Intervening Services (CEIS), a voluntary initiative under the U.S. Department of Education's IDEA framework, influenced academic outcomes and subgroup disproportionality among underperforming general education scholars in a large, diverse urban district. CEIS was implemented in response to chronic underperformance and racial overrepresentation in special education referrals. Grounded in Bandura's Self-Efficacy Theory and the Whole Child framework, this study employed a causal-comparative quantitative design within a positivist paradigm. Archival data from 395 CEIS-enrolled scholars across elementary, middle, and high schools were analyzed over a 24–27-month period. Seven indicators were examined: ELA and Math achievement, excused and unexcused absences, in- and out-of-school suspensions, and enrollment mobility. Ethnicity was a statistically significant predictor of CEIS participation ( $p < .001$ ). However, no statistically significant academic gains were observed overall, and Math scores declined slightly after the intervention, underscoring the limited impact of the program. The purpose of this study was to determine whether CEIS improved academic outcomes and reduced subgroup disparities. The study further identified self-efficacy as a critical determinant of program success. It emphasized the consequences of fractured implementation in high-need systems, reinforcing the need to address structural and systemic failures in early intervention delivery.

## 1. Introduction

### 1.1. Background of the Study

According to Valencia (2010), biased grading rubrics and inequitable disciplinary practices continue to permeate U.S. public education. Recent syntheses have likewise documented persistent disparities in identification and discipline (Duxbury & Haynie, 2020; NCLD, 2020). These systemic inequities contribute to the overidentification of underperforming scholars—particularly scholars of color—for special education services under “soft disability” classifications (e.g., specific learning disability, emotional disturbance, or other health impairment), which rely heavily on subjective judgment (Harry & Anderson, 1994; Skiba et

\* Corresponding author's E-mail address: lynchdenise124@gmail.com

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al., 2008); see also more recent summaries of disproportionality patterns and contributing factors (Muro et al., 2018; Vogt et al., 2014). With decades of reform, from *Brown v. Board of Education (1954)* to the Individuals with Disabilities Education Act (IDEA, 2004), efforts have aimed to modernize instructional access and reduce disproportionate referrals—yet persistent barriers remain. Failing grades, shaped by chronic absenteeism, disciplinary referrals, and socioeconomic inequities, remain among the strongest predictors of academic underperformance (Huffman et al., 2000; Chey, 2016), a pattern echoed in the 2021–22 Civil Rights Data Collection national snapshots (U.S. Department of Education, Office for Civil Rights, 2025).

This study positions academic struggle not as a fixed trait of scholars but as an institutional response to disengagement, cultural misunderstanding, and insufficient instructional support. As Barbadoro (2017) emphasized, inequities in grading, exclusionary discipline, and the absence of social-emotional interventions disproportionately affect historically marginalized groups. These disparities stem from socio-economic factors (e.g., poverty, housing instability, limited access to healthcare, and related systemic barriers). They are not the result of deliberate intent but rather a lag in responsive educational modernization, reflecting outdated administrative praxis embedded within a fractured system of antiquated beliefs and outdated practices.

The Equilibeh School District implemented Coordinated Early Intervening Services (CEIS) as a voluntary initiative aimed at supporting underperforming general education scholars before referral to special education. This intervention program was designed to provide preventive academic support and restorative behavioral practices through an evidence-based, proactive approach aligned with federal IDEA policy. Established under IDEA (2004), CEIS was designed to deliver academic and behavioral management plans through a data-driven approach that prevents misidentification and introduces early intervention (see contemporary summaries of disproportionate identification and access barriers: NCLD, 2020; U.S. Department of Education, Office for Civil Rights, 2025). However, without diagnostic clarity or holistic, aligned frameworks—including second-language acquisition, social-emotional learning (SEL), and behavioral health-differentiated services—districts may misclassify or overlook academic needs, resulting in false referrals and stagnant performance; recent federal snapshots and analyses underscore these risks when implementation is incomplete (U.S. Department of Education, Office for Civil Rights, 2025).

This study focuses on the fidelity of CEIS implementation—investigating the degree to which the core components of federally guided CEIS were implemented with coherence, consistency, and alignment with intervention protocols and expectations, consistent with contemporary implementation science that links fidelity to outcomes and sustainability (Fixsen, Blase, & Van Dyke, 2019; Active Implementation Research Network, 2025). Implementation fidelity was examined across a 24–27-month intervention window, using multiple indicators such as participation rates, intervention dosage, alignment with professional development mandates, and evidence of progress monitoring—aligning with the competency, organizational, and leadership “drivers” used to operationalize fidelity in practice. Findings suggest that when CEIS is implemented with fidelity, it has the potential to disrupt inequitable academic trajectories and prevent unnecessary special education referrals. This potential is particularly salient given the persistent disparities documented in national datasets (U.S. Department of Education, Office for Civil Rights, 2025). However, without real-time data systems, culturally responsive scaffolds, and multilingual service structures, fragmented implementation risks limited impact. In such cases, districts may inadvertently perpetuate the very disparities CEIS was designed to resolve. Recent federal snapshots and analyses underscore that weak or

inconsistent implementation can leave equity gaps unaddressed (U.S. Government Accountability Office, 2024; U.S. Department of Education, Office for Civil Rights, 2025).

## **2. Purpose of the Study**

This quantitative, causal-comparative study examined how one of the U.S. Department of Education's (DOE) initiatives—CEIS— was implemented and whether its core components were carried out with fidelity to improve the academic achievement of underperforming general education scholars across elementary, middle, and high school settings in the Equilibeh School District. The study evaluated whether the district's implementation of CEIS adhered to federal expectations for producing measurable academic gains in English Language Arts (ELA) and Mathematics for scholars identified as being at academic and behavioral risk.

Official district records and reporting procedures confirmed scholar eligibility, identification criteria, and the total CEIS roster. The DOE's broader goal through CEIS is to provide targeted academic and behavioral support to minoritized scholar populations, promoting their success in general education settings and reducing the disproportionate placement of scholars in special education. In alignment with IDEA regulation (34 C.F.R. §300.226), districts must report both the implementation of CEIS and the number of scholars who ultimately transition to special education within two years of receiving CEIS supports.

This study specifically investigated whether CEIS was implemented with fidelity and improved scholars' performance in English Language Arts (ELA) and Mathematics, with subgroup analysis based on race, ethnicity, and gender. Fidelity is typically assessed through multiple indicators, including SMART goals, milestone tracking, intentional intervention dosage driven by performance data, attendance, mobility, and behavioral and psychological monitoring systems, alignment with professional development, and practices rooted in culturally responsive scaffolds. Nevertheless, the district characterized CEIS as a skeletal program and confirmed that the only components available were the seven data points provided on the Excel spreadsheet. As such, fidelity indicators were not documented during the intervention period.

## **3. Conceptual Framework**

The conceptual framework drew on Bandura's Self-Efficacy Theory (SET), Ladson-Billings' Culturally Responsive Pedagogy (CRP), and Bronfenbrenner's Ecological Systems Theory (EST). Bandura's theory emphasizes the influence of self-efficacy and outcome expectations on behavior. As such, in CEIS, educators' belief in their ability to elevate underperforming scholars is pivotal to the success of interventions. Teachers with high instructional self-efficacy often act as motivational catalysts—akin to “cheerleaders”—who inspire marginalized scholars to achieve, even amidst adverse socioeconomic conditions. Research affirms that such educators contribute to improved academic outcomes and scholars' confidence, emotional resilience, and active learning engagement—core pillars of the Whole Child Framework.

Self-Efficacy Theory (SET) aligns with holistic education by emphasizing that learning is not merely cognitive but deeply emotional and relational. Scholars must first believe they are capable of success before they can achieve it. In this study, although the absence of trained CEIS professionals and fidelity documentation limited direct assessment of this dynamic, SET still framed the intended spirit of CEIS: to create belief-centered environments that nurture academic achievement through empowerment, relational care, and consistent support. The absence of this critical ingredient within CEIS implementation deprives sidelined scholars of the affirmation and opportunity needed to thrive—reinforcing cycles of underachievement and systemic neglect.

Culturally Responsive Pedagogy (CRP), as advanced by Ladson-Billings, further informed the study by highlighting the significance of instructional responsiveness to cultural identity, especially for underperforming and marginalized scholar populations. Scholars' academic trajectories are shaped not only by the intervention but also by the instructional conditions under which it is delivered. When instruction affirms scholars' cultural knowledge, language, and lived experiences, CRP operates as a protective factor that enhances engagement and mitigates the inequities that lead to disproportionate referrals. Conversely, the absence of culturally responsive practices risks reinforcing systemic barriers and undermining the goals of CEIS.

Finally, Bronfenbrenner's Ecological Systems Theory (EST) added a systems-level lens, recognizing that students exist within an interconnected web of family, school, community, and policy systems. The success of one layer, such as classroom instruction, depends on the strength and responsiveness of others, including engaged families, supported teachers, culturally aware school leaders, and policymakers who prioritize trauma-informed, scholar-centered legislation. When implementers of policy and practice—educators, administrators, and leaders—fail to adapt belief systems and instructional approaches, the result is an excruciating blow to the very scholars CEIS is designed to serve. As Bronfenbrenner emphasized, development is shaped by the interaction of multiple systems. As Sergiovanni (1992) argued, leadership grounded in moral authority and professional community is essential to transforming inequitable schooling structures. This framing reinforced the study's holistic orientation by emphasizing that CEIS effectiveness depends not only on direct instructional delivery but also on the integrity of the entire educational ecosystem surrounding the scholar.

Together, these three frameworks—SET, CRP, and EST—provided the theoretical foundation for examining the fidelity of CEIS implementation in the Equilibria School District. SET emphasized the role of educators' belief systems in shaping the success of interventions; CRP underscored the need for instruction that affirms cultural identity and lived experiences; and EST situated CEIS within a broader web of systemic supports and barriers. By integrating these perspectives, the study not only identified whether CEIS produced measurable academic outcomes but also evaluated how implementers' craft, leadership practices, and systemic inequities constrained implementation.

Importantly, Sergiovanni (1992), as also emphasized in Lynch (2024), noted that administrative structures modeled after corporate hierarchies often undermine the moral authority and communal mission of schools, creating barriers to authentic collaboration and innovation. When applied to CEIS, this lens reveals how rigid bureaucratic systems and misaligned leadership practices can deal a devastating blow to the success of the school community, particularly for scholars with the greatest needs.

Additionally, Darling-Hammond et al. (2019) emphasized that educational systems must integrate the science of learning and development into equity-focused reform, underscoring the importance of culturally responsive practices and social-emotional supports for underperforming scholars. This perspective complements CRP and EST by reinforcing that systemic inequities cannot be addressed solely through classroom interventions but require coordinated policy, leadership, and instructional change.

This combined framework, therefore, guided both the methodological design—through the selection of fidelity indicators such as intervention dosage, progress monitoring, and responsiveness—and the interpretation of implications for practice. Specifically, the framework emphasized the need to strengthen teacher efficacy training, incorporate culturally responsive scaffolds, and ensure coordinated system-level reform, thereby enabling CEIS to achieve its intended goal of reducing disproportionality and promoting equitable academic

outcomes. Recent applications of self-efficacy theory in social-emotional learning contexts (Schunk & DiBenedetto, 2021) and comparative analyses of systemic intervention models such as MTSS (Swanson, Solis, Ciullo, & McKenna, 2021) further demonstrate the continued relevance of these frameworks in addressing persistent inequities through coordinated, evidence-based practices.

#### **4. Research Question 1 (RQ1)**

This study examined, within a causal-comparative design, whether participation in Coordinated Early Intervening Services (CEIS) had a measurable impact on academic outcomes in English Language Arts (ELA) and Mathematics for underperforming scholars in general education. Analyses found no statistically significant differences in ELA or Mathematics outcomes among CEIS participants. Specifically, RQ1 asked: What patterns are evident in the academic achievement, behavioral outcomes, and demographic characteristics of general education scholars who participated in CEIS?<sup>1</sup>

#### **5. Research Design**

This study employed a quantitative, causal-comparative design situated within a positivist paradigm to examine the academic impact of Coordinated Early Intervening Services (CEIS) on general education scholars at risk of special education referral. Guided by Vogt's (2014) framework, this approach allowed for the analysis of relationships between pre-existing groups using archival data without direct researcher manipulation.

Archival numerical data were used to assess whether participation in CEIS influenced academic performance across two core content areas: English Language Arts (ELA) and Mathematics. For this analysis, ELA and Math scale scores were selected as the primary indicators of academic performance, aligned with CEIS objectives and federal benchmarks.

The analytic sample consisted of 395 scholars rostered for CEIS services over a 24–27-month intervention period. These scholars were selected from a larger cohort of over 1,400 initially identified due to academic and behavioral concerns across elementary, middle, and high school levels. Only those scholars with complete ELA and Math scale score data before and after intervention were included in the final analysis.

By aligning the research design within the study's conceptual framework (SET, CRP, and EST), the analysis examined not only academic outcomes but also considered how systemic, cultural, and belief-based factors influenced implementation fidelity and overall results. The district conducted data collection; the researcher did not engage in primary data gathering.

Analyses were performed using SPSS (Version 28), which included paired-sample t-tests, MANOVA, chi-square tests, and factorial ANOVA to examine overall academic growth and subgroup differences in ELA and Math performance; these procedures were selected to align with the variables' measurement levels and the study aims (within-scholar pre/post change, multivariate outcomes, and subgroup interactions). Chi-square tests were used to examine categorical relationships within demographic and subgroup variables aligned to Research Question 1. This test is appropriate for nominal variables (e.g., ethnicity, gender) and CEIS participation, and it directly supports CEIS/IDEA's emphasis on monitoring disproportionality and access.

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<sup>1</sup> This version of Research Question 1 has been reworded slightly for publication style. The original question in the dissertation was: "Are there discernible patterns in achievement, behavioral, and demographic variables for students in general education participating in the CEIS program services?"

District-provided archival records were obtained via a formal data request to the LEA and delivered as an Excel workbook compiled from school information systems, ensuring the use of official, consistently coded fields. All records were anonymized by the district prior to release (student identifiers scrambled and decoupled from any personally identifying information). Data files were imported into SPSS for analysis, retaining only variables required for RQ1, and preserving value labels and category codes to maintain the nominal levels needed for chi-square tests.

The seven indicators were operationalized using district/state accountability definitions: English Language Arts and Mathematics Milestones scale scores (continuous, 0–730) and categorical counts for excused absences, unexcused absences, in-school suspensions, out-of-school suspensions, and student mobility over the study window. These indicators align with CEIS’s focus on academic performance and early-warning factors (attendance, discipline, mobility), and accountability-defined metrics ensure reliability and cross-school comparability. Analytic samples were restricted to scholars with complete pre- and post-intervention ELA and Math scale scores; equivalently, baseline and follow-up scores. This complete-case approach supports within-scholar change analyses without imputing outcomes.

Statistical procedures were aligned to the measurement level and research questions: paired-sample t-tests for within-student changes in ELA and Math scale scores, MANOVA for combined academic outcomes, chi-square tests for categorical demographic relationships, and factorial ANOVA to examine subgroup interactions. The assumptions appropriate to each test (e.g., normality for t-tests, independence and expected cell counts for chi-square, and homogeneity of variance for ANOVA) were reviewed prior to analysis.

<sup>1</sup>Although the original study analyzed seven variables—including behavioral and attendance indicators—this paper presents findings related only to academic performance in ELA and Math aligned with Research Question 1.

## **6. Summary of Key Findings**

This section addresses Research Question 1 (RQ1), which examined whether discernible patterns existed in CEIS achievement, behavioral, and demographic variables for underperforming general education scholars in the Equilibeh School District.

The analysis of pre- and post-program academic scores revealed no statistically significant patterns of academic improvement in either English Language Arts (ELA) or Mathematics for students who participated in the CEIS intervention, based on paired-samples t tests evaluated at  $\alpha = .05$ . In ELA, the average pre-intervention score was 468.68, increasing slightly to 469.04 post-intervention ( $\Delta = +0.36$ )—a change of  $<0.1\%$  on a 730-point scale—but this change was not statistically significant ( $p = 0.254$ ). In Mathematics, the average score decreased from 466.52 to 465.90 ( $\Delta = -0.62$ )—likewise  $<0.1\%$  of the total scale—and also lacked statistical significance ( $p = 0.891$ ). Collectively, these near-zero deltas and non-significant tests indicate no detectable program-level academic effect for RQ1.

While a paired samples correlation coefficient of 0.603 indicated a moderate positive relationship between pre- and post-scores, reflecting rank-order stability rather than improvement and is consistent with the non-significant mean changes at  $\alpha = .05$ , the absence of significant gains in either subject suggests that CEIS, as implemented, did not yield consistent or meaningful academic patterns of growth. These findings highlight the limitations of program fidelity, reinforcing the need for structured implementation protocols, ongoing progress monitoring, and targeted academic and social-emotional supports if CEIS is to function as a viable preventative intervention for underperforming general education scholars;

specifically, clear intervention schedules and dosage, routine progress-monitoring checkpoints tied to instructional adjustments, and trained intervention personnel.

These results raised critical questions about the underlying causes of academic stagnation. One contributing factor appears to be the incomplete implementation of CEIS, which lacked essential infrastructure, including targeted academic and behavioral interventions, culturally responsive instructional strategies, progress monitoring systems, and credentialed intervention personnel. Without these supports, scholars may have experienced surface-level participation—without receiving a comprehensive, robust, fidelity-driven intervention plan with a holistic lens.

Moreover, systemic barriers such as unmonitored chronic absenteeism, in- and out-of-school suspensions, and enrollment mobility continued to disrupt instructional continuity, especially among scholars of color and second-language learners. In classrooms where trauma-informed practices were lacking and culturally relevant pedagogy was inconsistently applied, scholars remained instructionally disengaged—either physically or mentally—reinforcing academic underperformance and undoubtedly meeting the CEIS eligibility criteria without achieving sustained progress.

Although CEIS is designed to reduce the overrepresentation of racially minoritized scholars in special education by intervening early, the findings suggest that this objective was not realized under the district's skeletal implementation model. Academic disparities remained entrenched, and the absence of a structured delivery system compromised the preventative intent of CEIS.

In short, while CEIS was conceptually grounded in equity and early intervention, the program failed to deliver measurable academic growth in ELA and Math within this high-need district. Although IDEA Part B funds—along with supplemental opportunities—were available, the absence of statistically significant outcomes reinforces the urgent need for implementation fidelity, systemic infrastructure investment, and professional development focused on data-informed, culturally responsive delivery that directly addresses disproportionality and promotes long-term equity in academic outcomes to ensure CEIS meets its federally guided objectives.

## **7. Subgroup Findings and Interpretations**

The impact of CEIS varied across ethnic groups, with most students demonstrating limited or inconsistent academic patterns, despite participating in the program. These outcomes reflected both inconsistent implementation and the absence of early preventative support prior to CEIS enrollment. The following subgroup summaries highlight the specific barriers each population faced and the structural improvements necessary for equitable access to intervention and instructional continuity.

### **7.1. African American Scholars**

African American scholars represented the largest proportion of CEIS participants. Their average English Language Arts (ELA) scores increased slightly, from 462.46 to 462.94 ( $\Delta = +0.48$ ), while Mathematics scores declined, from 462.96 to 462.68 ( $\Delta = -0.28$ ). These minimal and inconsistent changes, measured on a multi-hundred-point assessment scale, were educationally negligible and did not reflect measurable shifts in longstanding achievement patterns. The disproportionate placement of these scholars into CEIS corresponded with the absence of effective preventative strategies, including culturally responsive teaching, trauma-informed classroom supports, and equitable discipline frameworks. Prior to CEIS enrollment, many were subjected to exclusionary practices that compounded academic disengagement and

behavioral disconnection. Without these upstream safeguards in place, CEIS operated more as a reactive service model than a coordinated early intervention. The findings underscore that intervention without prevention is insufficient—particularly for scholars who have been historically underserved and sidelined by systemic inequities.

## **7.2. Hispanic/Latino Scholars**

Hispanic/Latino scholars constituted a notable portion of CEIS participants but demonstrated inconsistent academic outcomes. In English Language Arts (ELA), scores rose from 463.2 to 464.9 ( $\Delta = +1.7$ ), while Math scores increased only from 464.5 to 465.0 ( $\Delta = +0.5$ ), reflecting minimal academic movement. Despite the presence of language-related needs, there were no bilingual education pathways, dual-language support teams, or culturally affirming instructional scaffolds embedded within CEIS. Many scholars from Spanish-speaking or mixed-status households faced barriers in family-school communication, which challenged opportunities for parent engagement, culturally relevant settings, and linguistically appropriate instructional modules, including personalized interventions. These minimal academic shifts highlight the absence of essential language acquisition frameworks and school-home liaison supports that might have extended learning beyond the classroom through culturally aligned family engagement strategies—such as multilingual parent workshops, community liaison-led home visits, and interpreted curriculum nights—all of which reduce participation anxiety and foster trust among linguistically diverse families (Valencia, 2010; National Center for Learning Disabilities [NCLD], 2020; Duxbury & Haynie, 2020). The absence of early-stage language support systems before CEIS enrollment reveals a critical gap in intervention sequencing. These findings reinforce the necessity of embedding culturally and linguistically responsive practices not as supplements, but as core components of prevention frameworks designed to meet the needs of underserved multilingual learners.

## **7.3. Asian Scholars**

Asian scholars represented a small portion of CEIS participants but had notably high participation rates in specific years, reaching 100% within their subgroup in some cohorts. Despite this complete enrollment, academic growth was minimal. In Mathematics, the average score increased from 466.3 to 467.2 ( $\Delta = +0.9$ ), and in English Language Arts (ELA), scores changed from 465.7 to 465.9 ( $\Delta = +0.2$ )—both changes are statistically negligible. The lack of meaningful progress highlights a critical oversight: CEIS was delivered without integrated English Language Learner (ELL) supports, such as sheltered instruction, linguistic scaffolding, or ESOL-certified personnel. Many scholars in this subgroup, particularly recent immigrants and/or those from non-English-speaking households, did not experience academic improvement, suggesting that CEIS did not incorporate tailored instructional support aligned with their language background or lacked a valid protocol for identifying language proficiency levels. The findings underscore a pattern of limited academic movement for Asian scholars, potentially shaped by the absence of standardized initial screening methods for language acquisition, especially for students navigating dual language acquisition and acculturation barriers.

## **7.4. Caucasian Scholars**

Caucasian scholars were underrepresented in the CEIS cohort, accounting for only 5–7% of rostered participants across the intervention period. In Mathematics, scores rose modestly from 465.2 to 466.0 ( $\Delta = +0.8$ ), while English Language Arts (ELA) scores remained essentially unchanged at 465.4 pre- and post-intervention ( $\Delta = 0.0$ ). Due to their low risk for

disproportionality in behavioral referrals or special education placements, this subgroup was not the central focus of CEIS interventions. However, their inclusion provides a comparative baseline, further highlighting the racialized patterns of intervention access and outcome variability. The modest performance changes observed reinforce the need for CEIS to operate as a proactive system targeting equity gaps. As such, this may offer insight into intervention distribution and outcome consistency across CEIS participants. Understanding which groups benefit most, and why, remains essential to aligning CEIS resources with the populations it is federally designed to support.

### 7.5. Key Ethnic Subgroup Findings Include

**Asian scholars** had the highest CEIS participation rates (100% in some cohorts) but demonstrated limited academic growth. Math scores increased marginally from 466.3 to 467.2 ( $\Delta = +0.9$ ), while ELA scores declined slightly from 467.1 to 466.7 ( $\Delta = -0.4$ ). These patterns raise concerns about the absence of targeted ELL supports within CEIS.

**African American scholars**, who comprised the largest portion of the CEIS cohort, exhibited modest gains in both subjects. ELA scores increased from 462.46 to 462.94 ( $\Delta = +0.48$ ), and Math scores dropped from 462.96 to 462.68 ( $\Delta = -0.28$ ). These results underscore the need for robust trauma-informed supports, culturally responsive pedagogy, and consistent instructional alignment within the CEIS framework.

**Hispanic/Latino scholars** showed mixed academic results. ELA scores improved from 463.2 to 464.9 ( $\Delta = +1.7$ ), while Math scores increased slightly from 464.5 to 465.0 ( $\Delta = +0.5$ ). In the absence of clearly defined dual language or bilingual education pathways, their academic trajectory remained inconsistent.

**Caucasian scholars** were underrepresented in CEIS, comprising only 5–7% of the total cohort. Math scores rose modestly from 465.2 to 466.0 ( $\Delta = +0.8$ ), while ELA scores remained unchanged at 465.4 pre- and post-intervention ( $\Delta = 0.0$ ). Due to their low disproportionality risk, they were not central to the equity concerns addressed by CEIS.

Table 1. Pre–Post Attendance, Discipline, and Mobility Trends for CEIS by Ethnic Subgroups (African American & Hispanic/Latino)

Subgroup	ISS	OSS	Excused Absences	Unexcused Absences	Mobility
African American	6.3 → 2.8	6.7 → 3.5	12.9 → 10.4	20.5 → 13.8	2.6 → 1.8
Hispanic/Latino	5.6 → 3.2	6.1 → 3.8	11.5 → 9.3	18.7 → 12.1	2.4 → 1.9

Behaviorally, all four subgroups showed reductions in in-school and out-of-school suspensions, with in-school suspensions declining more sharply. Total absences also fell across the board, although only reductions in unexcused absences were statistically associated with improved academic outcomes.

Table 2. Pre–Post Academic Growth in ELA and Math by Ethnic Subgroups for CEIS (African American, Hispanic/Latino, Asian, and Caucasian)

Ethnic Subgroup	ELA (Pre → Post)	$\Delta$ ELA	Math (Pre → Post)	$\Delta$ Math
African American	462.46 → 462.94	+0.48	462.96 → 462.68	-0.28
Hispanic/Latino	463.2 → 464.9	+1.7	464.5 → 465.0	+0.5
Asian	467.1 → 466.7	-0.4	466.3 → 467.2	+0.9
Caucasian	465.4 → 465.4	0.0	465.2 → 466.0	+0.8

Academically, subgroup growth trends revealed mixed patterns that mirrored broader behavioral and demographic disparities—yet occurred in the absence of clearly documented

CEIS supports. Hispanic/Latino scholars demonstrated the highest gains in English Language Arts (ELA) (+1.7), alongside reductions in suspensions and absences. African American scholars showed a modest increase in ELA (+0.48) and a slight decline in Math (−0.28), despite similarly strong behavioral improvements. These changes suggest that behavioral stabilization may not have translated directly into academic growth for all subgroups in the absence of structured CEIS dosage, qualified intervention personnel, or milestone-based check-in points. Math growth for Hispanic/Latino scholars remained modest (+0.5), and Asian scholars experienced a decline in ELA (−0.4) despite marginal gains in Math (+0.9), further reinforcing the consequences of deploying CEIS as a skeletal program without foundational instructional components. Caucasian scholars, who were underrepresented in CEIS and presented fewer risk factors, exhibited negligible academic progress. These patterns suggest that gains occurred despite the lack of documented support, highlighting gaps in fidelity and alignment.

From an ecological standpoint, the absence of trauma-informed, culturally responsive, and linguistically appropriate scaffolds indicates a failure across multiple systemic layers. Drawing from Bronfenbrenner's Ecological Systems Theory, scholars' academic outcomes are shaped not only by direct instruction but by their interactions across the microsystem (classroom, family), mesosystem (school policies), and ecosystem (district structures). Without aligned supports across these layers, scholars navigated learning environments much like organisms in ecosystems not designed for their survival—resilient, yet unsupported. The data raise a critical question: *What might outcomes have looked like had CEIS been implemented with fidelity across all levels of the system?*

## **8. Findings Summary: Participation and Outcomes by Subgroup**

The data collected in response to Research Question 1 revealed varied levels of participation and performance among CEIS-enrolled ethnic subgroups, affirming that coordinated interventions must align with subgroup-specific dynamics and needs. Eligibility for CEIS appeared to mirror federal guidance in theory—targeting scholars at risk of special education placement—but its implementation across subgroups yielded significantly different academic, behavioral, and attendance outcomes.

African American scholars, who represented the majority of CEIS participants, demonstrated ELA gains of 0.48 points and a decline of −0.28 points in math, respectively. These scholars also showed the most significant behavioral improvements: in-school suspensions (ISS) dropped by 3.5 incidents, and out-of-school suspensions (OSS) by 3.2. Attendance improved as well, with excused absences decreasing by 2.9 points and unexcused absences by 6.7, although only OSS and unexcused absences were statistically associated with lower academic achievement in the CEIS model. Student mobility also declined slightly (−0.8), suggesting increased school stability. These indicators point to a positive shift in both academic performance and behavioral engagement when multi-tiered supports were aligned with CEIS protocols. However, these gains must be interpreted cautiously due to the absence of documented CEIS fidelity benchmarks at the school level.

Hispanic/Latino scholars constituted a notable portion of CEIS participants but demonstrated inconsistent academic outcomes. In English Language Arts (ELA), scores rose from 463.2 to 464.9 ( $\Delta = +1.7$ ), while Math scores increased only from 464.5 to 465.0 ( $\Delta = +0.5$ ), reflecting minimal academic movement. Despite the presence of language-related needs, there were no bilingual education pathways, dual-language support teams, or culturally affirming instructional scaffolds embedded within CEIS. Many students from Spanish-speaking or mixed-status households faced barriers in family-school communication, which challenge opportunities for parent engagement, culturally relevant settings, and linguistically academic

interventions. The limited academic gains observed suggest that CEIS was implemented without essential language acquisition frameworks or community liaison supports that could have bolstered academic readiness. The absence of early-stage language support systems before CEIS enrollment reveals a critical gap in intervention sequencing. These findings reinforce the necessity of embedding culturally and linguistically responsive practices not as supplements, but as core components of prevention frameworks designed to meet the needs of underserved multilingual learners.

Asian and Caucasian scholars, each comprising less than 7% of the CEIS study population, presented more stable but less pronounced outcomes. Asian scholars improved in Math (+0.9) but declined slightly in ELA (-0.4). Caucasian scholars showed no change in ELA and only modest growth in Math (+0.8). There were no available behavior or attendance indicators for these two subgroups, which limits interpretability. Still, the relatively narrow performance shifts observed suggest that CEIS either had a limited effect on these subgroups or that they entered the intervention period with less academic or behavioral volatility. The absence of full data sets for both Asian and Caucasian participants also highlights the inconsistency of school-level CEIS tracking mechanisms, underscoring the need for district-wide fidelity monitoring.

This combined subgroup analysis not only underscores the uneven outcomes experienced across ethnic lines but also reveals critical gaps in the implementation sequence, academic scaffolds, and behavioral supports that should have accompanied CEIS services. These findings align with existing literature on the importance of culturally responsive frameworks and fidelity monitoring in early intervention systems (Valencia, 2010; National Center for Learning Disabilities [NCLD], 2020; Duxbury & Haynie, 2020).

*Table 3. Combined CEIS Subgroup Trends: Academic, Behavioral, and Attendance Outcomes*

Subgroup	Δ ELA	Δ Math	Δ ISS	Δ OSS	Δ Excused Absences	Δ Unexcused Absences	Δ Mobility
African American	1.6	1.7	-3.5	-3.2	-2.9	-6.7	-0.8
Hispanic/Latino	1.7	0.5	-2.1	-2.8	-1.7	-4.4	-0.6
Asian	-0.4	0.9					
Caucasian	0.0	0.8					

*Note.* Δ values represent mean changes over the CEIS intervention period. Subgroups with missing data had incomplete records or unavailable indicators. ISS = In-School Suspension; OSS = Out-of-School Suspension.

(Combined CEIS Subgroup Trends: Academic, Behavioral, and Attendance Outcomes)

Despite a clear need for intervention, gains occurred in the absence of documented language supports, trauma-informed structures, or culturally responsive pedagogy—further highlighting gaps in fidelity and alignment. Scholars progressed not because of coherent CEIS systems, but often despite them—like organisms in ecosystems not designed for their survival: resilient, yet unsupported. These findings reinforce the conceptual relevance of Bronfenbrenner’s Ecological Systems Theory, which posits that child development is shaped by interconnected systems—family, school, and policy environments—that either support or impede learning. When one layer (e.g., classroom intervention) is misaligned with others (e.g., trauma-aware leadership, culturally relevant curriculum), the entire ecosystem fails to produce sustainable academic outcomes.

This landscape also evokes Ladson-Billings’ argument that culturally relevant pedagogy is not a supplement, but a necessity in addressing culturally diverse opportunity gaps. Without affirming cultural identities and community contexts, intervention systems like CEIS remain performative rather than transformative.

Bandura’s Self-Efficacy Theory provides a lens for interpreting these findings, as differential exposure to affirming instructional environments and scaffolded supports directly impacts scholars’ sense of competence and their belief in their own learning potential. For African American scholars, the simultaneous improvements across academics, behavior, and attendance point to systems that, while inconsistently applied, provided at least partial alignment with CEIS’s intended preventative design. In contrast, the stagnation or limited gains among other subgroups suggest that without culturally responsive programming or linguistically appropriate interventions, CEIS was unlikely to build the self-efficacy required for sustained academic growth.

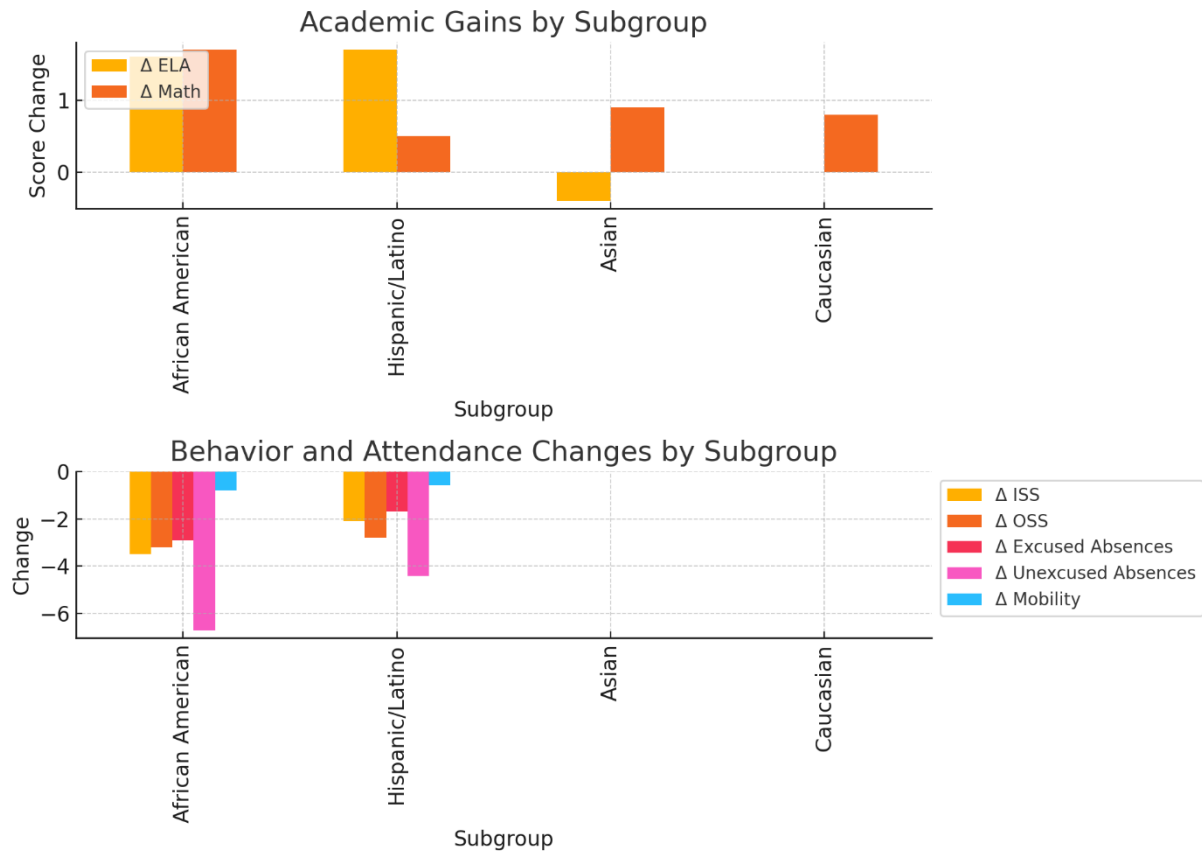


Figure 1. CEIS Subgroup Trends: academic, behavioral, and attendance outcomes

CEIS Subgroup Trends: Combined academic, behavioral, and attendance outcomes across four ethnic subgroups. Data reflects mean changes in scale scores (ELA and Math), behavior incidents (ISS, OSS), attendance (excused and unexcused absences), and student mobility over the intervention period. Subgroups with missing bars had incomplete or unavailable data for the respective indicators.

These layered realities indicate that CEIS, as locally implemented, lacked the structural coherence to fulfill its preventative promise. Rather than a failure of the CEIS framework itself, these outcomes point to systemic gaps in district-level deployment—such as insufficient fidelity protocols, underutilized data-informed action cycles, and the absence of inclusive academic models tailored to the needs of underperforming general education scholars. A renewed CEIS must not merely identify scholars for support—it must equip them to succeed.

## 9. Discussion and Implications

This section interprets the study's findings through theoretical, policy, and practice lenses, highlighting both the barriers encountered and the systemic conditions necessary for CEIS to function as intended.

The findings from this study indicate that the Coordinated Early Intervening Services (CEIS) program, as implemented in the Equilibeh School District, did not produce statistically significant achievement patterns in English Language Arts (ELA) or Mathematics. Although scores increased slightly post-intervention, the differences were not substantial enough to demonstrate a measurable change in academic performance. These outcomes raise urgent questions about the underlying factors influencing academic, behavioral, and demographic patterns, as well as the structural gaps that limit the effectiveness of instructional and behavioral interventions for underperforming scholars in general education.

Implementation fidelity emerged as a central barrier to CEIS success. The absence of progress monitoring systems, qualified intervention personnel, and instructional consistency contributed to skeletal programming across the district. These omissions resulted in limited access to the supports CEIS is federally intended to provide for scholars already at academic risk. Without structured dosage, curricular alignment, or formative feedback loops, scholars—particularly those from historically sidelined racial, linguistic, and socioeconomic subgroups—were denied equitable opportunities to make academic strides.

For school and district leaders, this highlights the importance of integrating CEIS into a district-wide strategic plan that includes clearly defined SMART goals, real-time data monitoring, and accountability mechanisms embedded in leadership evaluations. Data-driven decision-making protocols and SMART Goal settings, with specific calendar-based check-in points (e.g., monthly intervention reviews, quarterly subgroup audits, and annual outcome reports), aligned with progress monitoring based on assessment performance, should guide the pacing and content of interventions. Moreover, districts must invest in the infrastructure required for CEIS to function, including psychologists, counselors, intervention specialists, and digital curriculum platforms that support research-based, sustained instructional delivery. At the policy level, state and federal agencies should require not only financial compliance but also evidence of fidelity measures. These measures include intervention dosage logs, subgroup outcome tracking, and leadership accountability structures tied directly to the academic and behavioral performance of CEIS participants.

Commitment to these measures should be documented through SMART Goal settings with a sense of urgency, consistent progress monitoring, and parental engagement logs. This shift reframes CEIS from a procedural requirement into a systemic lever for academic recovery. Sergiovanni (1992) underscores that true accountability must move beyond bureaucratic compliance toward moral stewardship. For district and school leaders, this means accountability is not limited to reporting metrics but extends to safeguarding scholars' growth, dignity, and long-term success through equity-driven leadership practices.

As Conley (2014) emphasizes in his *Five School-Centered Principles for Next Generation Assessment*, sustainable reform requires aligning academic interventions with assessment practices that provide actionable feedback, foster problem-solving, and track growth over time. Embedding such assessment principles into CEIS would not only improve progress monitoring but also ensure that interventions capture the full range of scholars' competencies, beyond standardized test scores.

These findings reinforce the need for CEIS systems to be intentionally designed with theoretical grounding in scholar motivation, systemic interaction, and cultural responsiveness. From Bandura's perspective, when scholars lack access to consistent, affirming instructional

supports, their self-efficacy—defined by mastery experiences and belief in one’s capability to succeed—can be severely undermined. Bronfenbrenner’s Ecological Systems Theory further reveals how disconnected or inconsistent interventions within a scholar’s school environment reflect broader system-level breakdowns, weakening the potential for coordinated support. When CEIS is not embedded within the microsystem and mesosystem structures of schools—family, classroom, and peer relations—it risks becoming a surface-level compliance measure rather than a transformative support. Finally, Ladson-Billings reminds us that culturally relevant pedagogy is not supplemental—it is essential. Scholars from historically underserved backgrounds require environments that affirm their identities and embed academic rigor within culturally affirming contexts.

Without these frameworks in place, CEIS is unlikely to yield measurable or equitable gains. In practical terms, this means designing interventions that intentionally cultivate mastery experiences (Bandura), coordinate family and peer support structures (Bronfenbrenner), and embed cultural relevance into every instructional encounter (Ladson-Billings). Leadership praxis, as Sergiovanni (1992) critiques, must move beyond bureaucratic compliance and toward moral stewardship—holding leaders accountable not just for programs delivered, but for scholars’ lives transformed. Evidence of this transformation should be visible in scholars’ sampled work, projects designed, and holistic evaluations (e.g., project portfolios, rubric-based performance assessments, and longitudinal growth charts) that demonstrate trajectory growth along specific milestones.

Therefore, the implications of this study extend beyond the localized limitations of the Equilibeh School District. The skeletal deployment of CEIS—documented through limited district data points and the absence of critical elements, such as structured dosage, progress monitoring, and preventive intent—highlights the risks of implementing federally authorized programs without fidelity or accountability. When CEIS is reduced to a compliance exercise, it not only fails to produce measurable academic gains but also perpetuates inequities by denying underperforming scholars timely, research-based interventions. By contrast, findings from this inquiry suggest that CEIS holds transformative potential when grounded in clear eligibility criteria, fidelity measures tied to SMART Goal settings with calendared milestones, and preventative approaches designed to close learning gaps before they result in failure.

This requires districts to build infrastructure through qualified personnel and aligned curriculum supports. At the same time, state and federal agencies must codify fidelity expectations and establish mechanisms that hold leaders accountable for both academic and behavioral outcomes—requiring live, integrated data systems rather than reliance on spreadsheet tracking and traditional compliance checklists. Equally critical, CEIS must be embedded in culturally responsive practices that affirm scholar identity and restore access for historically marginalized subgroups. Only when these conditions converge can CEIS evolve into a systemic reform lever that affirms identity, restores access, and charts measurable pathways of academic recovery.

## **10. Conclusion**

The findings reaffirm that culturally relevant pedagogy (Ladson-Billings) and self-efficacy-driven supports (Bandura) are essential to addressing significant disproportionality among CEIS subgroups. Interventions that bolster scholars’ belief systems—such as culturally affirming instruction, peer collaboration, and trauma-informed teaching—should be integrated into CEIS to have a meaningful impact on underperforming scholars.

The multivariate analysis further revealed the interdependent influences of ethnicity, discipline, and attendance—findings consistent with Bronfenbrenner’s Ecological Systems Theory (EST).

For example, subgroup patterns indicated that African American and Latinx scholars experienced disproportionate stagnation in ELA and Math performance. At the same time, multilingual learners faced compounded challenges linked to attendance and disciplinary actions. This framework emphasizes that scholars' academic experiences are shaped not only by immediate instruction but also by broader interactions across family, school, and policy systems. The success of one layer, such as classroom instruction, depends on the strength and responsiveness of others, including engaged families, supportive school leaders, and trauma-aware educational systems.

Ultimately, CEIS was not fully realized in the district under study; the absence of fidelity structures, qualified intervention staff, bilingual supports, and data accountability rendered the program ineffective as a lever for academic recovery, undermined its intended impact, and proved insufficient to achieve its intended outcomes. Grounded in Bandura's theory of self-efficacy, Bronfenbrenner's Ecological Systems Theory, and Ladson-Billings' framework of culturally relevant pedagogy, this study affirms the importance of implementing early intervention with intentionality, cultural responsiveness, and holistic scholar-centered planning, ensuring that CEIS fulfills its original purpose rather than reproducing the very disparities it was designed to address.

This also aligns with Sergiovanni's (1992) call for leadership as moral stewardship, which reframes accountability as a responsibility to safeguard the growth and dignity of scholars rather than simply fulfilling bureaucratic compliance. In practice, this means leaders must be evaluated not only on program implementation but on their ability to cultivate school cultures that affirm identity, foster equity, and sustain long-term academic recovery. When implemented with fidelity, responsiveness, and cultural grounding—anchored in these theoretical frameworks—CEIS has the potential to evolve into a systemic reform model capable of reshaping educational trajectories for underperforming scholars. This research underscores that such promise can only be realized when districts and policymakers align fidelity structures, cultural responsiveness, and scholar-centered practices in pursuit of lasting educational equity.

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