

PART 4:

Designing Learning Pathways to Promote Pre-K–12 School Integration



ACTIVITIES AND ACHIEVEMENT

Explanation of Marks:
A—Excellent
B—Above Average
C—Average
D—Below Average
E—Not Doing Passing Work

ACTIVITIES	PERIOD					
	1	2	3	4	5	6
READING Understand					A	B
					A	A
					A	A
					B	B

Shows originality
Has ability to copy

IRREGULAR ATTENDANCE
or prolonged

ATTENDANCE

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Preface

About AIR and the AIR Equity Initiative

About the American Institutes for Research

Established in 1946, the American Institutes for Research® (AIR®) is a nonpartisan, not-for-profit institution that conducts behavioral and social science research and delivers technical assistance both domestically and internationally in the areas of education, health and human services, and the workforce. AIR's work is driven by its mission to generate and use rigorous evidence that contributes to a better, more equitable world. With headquarters in Arlington, Virginia, AIR has offices across the United States and abroad. For more information, visit air.org.

About the AIR Equity Initiative

In 2021, AIR launched the AIR Equity Initiative, a 5-year, \$100 million+ investment in behavioral and social science research and technical assistance to address the underlying causes of systemic inequities and to increase opportunities for people and communities. By funding inclusive and collaborative research and technical assistance efforts that engage partners from the beginning, the AIR Equity Initiative aims to foster bolder, strategic, and sustained ways to advance equity, especially in areas where investment is limited. Learn more at www.air.org/equity.

About the AIR Equity Initiative's Improving Educational Experiences Program Area

In an equitable educational system, a student's race and place of residence should not predict their access to the opportunities and resources that promote thriving and academic success. AIR Equity Initiative–funded projects in this program area aim to improve educational experiences and outcomes for students affected by the consequences of segregation. Specifically, these grants support projects that study and develop processes, interventions, and tools, in partnership with school districts and communities, to advance solutions that address the root causes of educational inequity. This work also aims to strengthen and learn from policy and technical assistance efforts to reduce racial segregation in housing and education across communities, districts, schools, and classrooms.

Call For Essays: Process and Perspectives

The AIR Equity Initiative issued a call for essays in August 2022 to inform and guide its work in educational equity and lift up evidence-based insights and ideas from the field. The authors of these essays are experts and practitioners in the field and their thoughts and viewpoints are based on deep knowledge and experience. However, it is important to note that the opinions and viewpoints in these essays are those of the authors and do not necessarily reflect the opinions or viewpoints of AIR, its staff, or its leadership.

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We offer our sincere appreciation to the expert reader panel who dedicated their time and attention to reviewing the ideas brought forth from this open call: Tanya Clay House; Tracy Gray, PhD; Preston Green, PhD; Makeba Jones, PhD; Kim Lane, EdD; Chinh Le; Effie McMillian, EdD; Na'ilah Nasir, PhD; Gary Orfield, PhD; Sonia Park; Arun Ramanathan, PhD; Lakeisha Steele; Zoe Stemm-Calderon, PhD; Adai Tefera, PhD; and Kevin Welner.

Finally, we extend our appreciation to the many researchers, activists, community advocates, professors, practitioners, and other experts who submitted essays. It is an honor to have learned from your work and we are thrilled to offer a sample of the many deserving submissions within this compendium.*

* The black-and-white cover image is from the records of the National Park Service. Youth march for integrated schools, October 25, 1958. National Archives at College Park, MD. <https://www.docsteach.org/documents/document/integration-youth-march>. Photo licensed under a [Creative Commons Public Domain Mark 1.0](https://creativecommons.org/licenses/publicdomain/1.0/) license.

Segregated schooling exists in all grade levels and education environments.

For instance, because of the severe racial wealth gap, young children may experience extreme preschool segregation in areas without universal public pre-K programs. This makes the expansion of early childhood education—to families of all income levels and regardless of ZIP code—a promising approach to overcoming the segregating effect of school attendance zones that regulate K–12 public school enrollment.

The harms of segregation also manifest through in-school learning pathways like gifted-and-talented or ESL programs that perpetuate a deficit framing for many students. Authors of the essays in this part outline ways to advance school integration through inclusive learning plan pathways, in addition to interventions around race and place.

Integration at the Start: Designing Pre-K Choice and Enrollment Systems to Promote Equity and Excellence

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As the benefits of prekindergarten (pre-K) programs have become evident, many states, school districts, and recently the federal government have set universal access as an explicit policy goal.^{1,2} Contexts as varied as Boston, the District of Columbia, Florida, Iowa, New York City, Oklahoma, Vermont, West Virginia, and Wisconsin enroll at least 70% of their 4-year-olds in publicly funded pre-K programs; Georgia, New York State, New Mexico, South Carolina, and Texas serve more than 50%.³ These and other pre-K expansions represent a sharp departure from the long-standing practice in public preschool programs, such as Head Start, of limiting enrollment to low-income families, which in effect segregate children by income and often by race/ethnicity.

Pre-K expansions have the potential to change this segregated landscape, but only if bold policy actions are taken. As pre-K doors open more widely, middle- and working-class families who do not qualify for public programs for low-income families—yet cannot afford the lofty tuitions of private preschools—will suddenly have affordable options. To serve this growing and diverse enrollment, states and districts commonly use “mixed-delivery” systems that locate programs in varied settings, such as public schools, charter schools, and community-based centers.⁴ Within these systems, families can assess their pre-K options and choose where to enroll within the constraints of program capacity and how public officials decide to allocate pre-K seats.⁵ These choice and enrollment processes typically operate outside K–12 school-assignment systems that tend to replicate residential segregation in public schools. Yet, increasing evidence indicates that pre-K settings are highly segregated by income and race/ethnicity, even in universal contexts. To counter this trend, assertive policy initiatives are needed to realize the rich opportunities posed by pre-K expansions to reduce the severe socioeconomic

and racial/ethnic segregation currently evident in the nation's public schools and pre-K systems.

Striving for Quality in Segregated Contexts

Efforts to achieve universality have gained policy and political momentum from empirical research that indicates short- and long-term gains from pre-K attendance.^{6,7,8} State funding for pre-K initiatives more than doubled from \$4 billion in 2002 to \$9 billion in 2021.⁹ Evidence that pre-K learning gains are strongly correlated with higher quality programs has motivated concerted policy efforts to promote equitable access to high-quality programs.^{10,11} Despite these efforts, empirical evidence suggests that program quality is often unequally distributed, even in universal contexts, with families in lower income and racially segregated communities having less access to programs with high-quality teaching.^{12,13,14,15,16} This discomforting reality highlights the inherent challenge of constructing pre-K systems that achieve both excellence and equity, given the nation's history of residential segregation and inequitable access to educational opportunity.

Our own work has indicated high levels of segregation across an urban universal pre-K system, but also some opportunities for integration.¹⁷ We examined the interplay between New York City's pre-K choice and enrollment process and the highly segregated residential context in which families make their decisions. We described the nature and location of racial/ethnic segregation across pre-K programs, and the extent to which it varies by children's race/ethnicity.¹⁸ We also contrasted segregation among programs with different enrollment priorities and programmatic offerings. We then explored segregation patterns across New York City's five boroughs and 32 community school districts, highlighting the degree to which those patterns relate to local racial/ethnic enrollment characteristics. Finally, we conducted a simulation that leverages family pre-K choices to maximize site-level racial/ethnic diversity and reduce between-site segregation.

We found that pre-K programs in New York City are extremely segregated by child race/ethnicity. The results indicate the complex interactions among family choices, seat availability, site-level enrollment priorities, and the city's algorithm for allocating pre-K seats.

A clear challenge facing integration efforts is that areas with multiple program options and greater racial/ethnic diversity exhibit the most extreme segregation, hinting at a pattern of self-sorting among families and a choice architecture that fails to promote integration. However, we found that most of the measured segregation lies within local communities rather than across them, suggesting that reducing segregation would not necessarily require families to choose programs far from home, removing a commonly cited obstacle to integration efforts. Our policy simulation also provides a considerable degree of hope. We found that providing families one of their top three choices—but in a manner that selects sites based on their racial/ethnic representation—reduces both overall segregation and segregation between particular racial/ethnic groups. Under the simulation, children would have to travel only 0.2 miles more to their pre-K site. We argue that this approach is more likely to withstand legal scrutiny, given that families are not being denied choice to further the aims of integration.

Overall, the results indicate both inherent challenges and significant opportunities to foster racial/ethnic diversity in pre-K programs within a highly segregated residential context and across sites that include programs primarily intended to serve low-income families. When considered with other research indicating that children of color are more likely to attend lower quality programs than white children, these findings call for bold policy strategies to promote integration in pre-K settings. Such strategies could be informed by a growing body of research that finds higher learning gains among children, particularly low-income children, who attend classrooms with peers diverse in background and skill levels.^{19,20,21,22} In short, equitable access to program quality, the north star of most pre-K expansions, and integration could go hand in hand.

Challenges and Possibilities of Pre-K Expansions

There are several challenges to promoting integration in pre-K settings that researchers, policymakers, and other stakeholders must realize. Even in areas comprising diverse child populations, residential segregation can make program integration difficult when parents prefer programs close to home. This pattern of segregation can be exacerbated by choice and enrollment systems that allow higher resourced families to navigate the process to gain access to higher quality programs for their children. Lack of transportation options for low-income families may further aggravate this inequity.²³ Finally, low-income families may seek services that are not provided by sites serving high-income families, creating incentives for those with lower incomes to select high-

poverty sites that focus on their strengths and needs. Each of these challenges, although varying in extent and severity in different areas, demands consideration when constructing a strategy to promote pre-K program integration.

At the same time, pre-K expansions pose new opportunities for several reasons. First, they offer enrollment to working-class, middle-, and upper-income families who have otherwise been excluded from public early education programs. They rely on choice and enrollment systems that allow parents to select among multiple settings within or outside their school districts, possibly mitigating the negative implications of neighborhood segregation that bedevil public school enrollments. They allow service-rich Head Start and childcare programs, which traditionally have enrolled only low-income families, to serve families across the income distribution. And finally, concerted efforts in both red and blue states to promote and align pre-K quality systemwide provide fertile ground for integration efforts, given the correlation between program sociodemographic composition and quality.

With these challenges and possibilities in mind, we propose a strategy to promote the integration of children by racial/ethnic and economic background in early education settings and to fulfill the goal of promoting equitable access to quality pre-K programs.

Conceptual Framework

The early education field has much to learn about families' decision making from recent advances in economic theory regarding how individuals choose among the options presented to them. Before these new perspectives, some economists and social scientists envisioned a school choice process unfettered by government intrusion, enabling families to identify the best schools for their children and exercise their market power to gain access.^{24,25} More recent work in the burgeoning field of behavioral economics has raised important questions regarding the extent to which families make autonomous choices in the market for education. In this view, school choices are affected by the design or "choice architecture" of the application and enrollment process that is created for families, including the menu and nature of options presented, the information they receive about these options and how to compare them, and the ease of choosing and enrolling.²⁶

This perspective beckons policymakers to consider how they structure and present educational choices to families and whether this structure and presentation serves their stated policy goals. Pre-K choice and enrollment systems are a salient example of choices that are shaped by policy decisions, as families navigate a process of application and enrollment that has been prescribed and designed for them by policymakers. Information on program options that might offer the potential for integration, for example, may be limited, hard to access, dependent on social networks, or entirely absent. Hence, we reject the premise that segregation in universal pre-K contexts is solely a reflection of self-sorting by parents, and we call upon policymakers to scrutinize how the choice and enrollment system could direct families to integrative options.

Proposed Strategy

The proposed strategy to promote integration in pre-K programs would engage three to five urban areas in different states. Each would locate its efforts within a research-to-policy partnership or collaboration that provides real-time data to inform and support sustained policy innovations to affect pre-K choices and enrollment patterns. Each effort would comprise a four-step process:

Step 1: Establish Data Systems

Create new or augment existing data systems to track choice and enrollment patterns by systemwide and site-level sociodemographic composition; teacher quality and compensation; classroom quality; and program services for families.

Step 2: Conduct Research to Inform Policy

Use data to conduct two types of research:

- a. *Conduct quantitative research* to analyze the severity, geography, and nature of segregation, as we have done in New York City. This research would distinguish between within-district or within-census-tract segregation and cross-district or cross-census-tract segregation and address such questions as:
 - How severe is program-level segregation, and how does it vary by geographic area and type of segregation?
 - How far do families travel to access pre-K programs, and how does it differ by their residential census tract, sociodemographic characteristics, and the quality of the programs where they enroll?

- How far would families have to go to access integrated programs?
 - How does participation in the formal choice and enrollment process affect program-level segregation/integration?
- b. *Conduct mixed-methods research* to gain a better understanding of how and why parents choose their pre-K programs. This research would address questions such as:
- How do families learn about and select pre-K programs?
 - What needs, preferences, and priorities shape their pre-K decisions?
 - How do families perceive and value integrated programs, and under what conditions would they choose them for their children?
 - How do families experience the formal choice and enrollment process? What obstacles do they encounter? What changes would they recommend? Why do some families elect not to use the choice system and enroll directly in pre-K programs?

Step 3: Use Research to Determine Policy Strategies

Use these research findings to select policy levers that would promote pre-K integration within the local social and political context, and design a choice and enrollment system to reflect those selections.

The core policy options fall into three categories that complement one another: (1) promote integration by altering program options for families; (2) promote integration by allocating a portion of program seats for subgroups of children; and (3) promote integration by designing a user-friendly choice and enrollment system that reflects policy decisions in #1 and #2. All policy strategies would operate within a voluntary choice and enrollment system in which public officials design a choice and enrollment system, invite parents to participate, and then allocate program seats while trying to accommodate parent preferences within the constraints of program capacity.

- a. *Promote integration by altering program options for families.* Responding to family needs, preferences, and priorities, policymakers alter the supply of pre-K choices to accommodate families while promoting integration. These policy actions include the following:
- Locate programs in or near mixed-income workplaces (e.g., corporate offices, universities, hospitals).

- Locate programs on neighborhood borders between low- and higher income communities.
- Subsidize transportation for families who choose to travel outside their neighborhoods for pre-K programs.
- Expand services for lower income families in higher quality sites, drawing on models such as community schools.
- Increase the supply of higher quality sites by, for example, closing teacher compensation gaps between school-based and center-based programs.

- b. *Promote integration by allocating a portion of program seats for subgroups of children.* To complement an altered supply of program options, policymakers enact a controlled-choice system in which a percentage of pre-K seats are prioritized for subgroups of children, such as children eligible for free-and-reduced-price lunch, children who are homeless, and children whose families are affected by incarceration.

While this strategy has been tested in New York City on an experimental basis, the strategy should be enacted systemwide (though not in every program) to promote integration effectively. Programs that are candidates for integration could be identified through an RFP process that would offer funding and in-kind services, such as technical assistance, to support the integration process. The strategy would thus be strengthened by simultaneously devoting resources to support program leaders, teachers, and families as they adapt to the assets and needs of a diverse community in transition to integrated classrooms. Resources should be used in part for teacher and family engagement to nurture ground-level support for and ownership of integration efforts.

Note that implementing controlled choice would likely reduce the number of families who receive their first-choice program, a number that public officials like to maximize and advertise when inviting parents to enroll in pre-K. However, this reduction would be balanced by fulfilling the goal of greater integration and the tandem pursuit of program quality. And although support for such efforts varies by political context, public support for integration initiatives can run higher than might be expected.²⁷

- c. *Promote integration by designing a choice and enrollment system that reflects policy decisions in #1 and #2.* Having selected a mix of policy levers that align with local

strengths, needs, and the sociopolitical context, policymakers design choice and enrollment systems that reflect their strategies.

For example, if policymakers decide to encourage families to travel outside their neighborhood, they could highlight such options in the choice and enrollment process and ensure that subsidized transportation is available. If policymakers opt to boost services for low-income families in sites selected for integration, they could market such enhancements to low-income families. If certain programs allocate seats for subgroups of children, these sites could be marketed as welcoming locations for diverse families. And, as noted, the program allocation process can be structured so that family preferences are honored, but in a manner that increases program diversity. In all cases, concerted efforts should attend to how well the choice architecture equitably serves all families, including those in lower resourced, multilingual, and/or socially isolated communities.

Step 4: Collaborate Across Areas

While these strategies would be crafted to align with the local context, they would be strengthened and sustained by a research-to-policy partnership and collaboration with similar peer efforts across geographic areas. Such collaborations enable innovative policymakers to draw upon real-time data, share ideas, learn from each other, and help to surmount the inevitable obstacles that arise. (For examples, see <https://nnerpp.rice.edu/early-childhood-education-subnetwork/>.)

Conclusion

This strategy represents a call for concerted research and policy attention to the potential of innovative initiatives to help integrate public schools via universal pre-K choice and enrollment systems. Our research in New York City could be replicated in other urban/suburban areas to identify challenges and opportunities to foster greater program-level racial/ethnic and economic integration. Such diversity would further strengthen ongoing nationwide efforts to create equitable access to high-quality pre-K programs. However, time is short: Pre-K choice systems are under construction and increasingly used by higher resourced parents who are learning how to navigate the process to their advantage. To create a level playing field in which all parents have access to high-quality and integrated programs, research needs to inform bold, innovative policy initiatives now.

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Integration and Immersion: The Potential of Two-Way Dual Language Immersion Programs to Foster Integration

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Introduction

From the peak of school desegregation in the 1980s, the nation's schools have reversed course toward resegregation.¹ This trend persists despite the United States becoming more racially, ethnically, and linguistically diverse since the mid-20th century.^{2,3} Dual language immersion (DLI) programs present a unique solution that could not only counteract historical segregation between white and Black students but also potentially diminish segregation of the growing population of multilingual learners (MLs).

Benefits of School Desegregation

Evidence consistently shows the positive effects of school desegregation and the detrimental effects of segregated schools. Black students who attend desegregated schools show higher levels of academic achievement compared to peers in racially segregated schools. Moreover, this same research shows no negative effect on the academic achievement of their white peers.^{4,5,6} Nonacademic benefits of desegregation include greater openness and acceptance of different races and ethnicities as well as greater life satisfaction and better health outcomes.^{7,8,9} In contrast, segregated schools are associated with lower quality educational environments and poorer student outcomes. These schools tend to have higher teacher turnover and fewer experienced teachers, both of which correlate with lower academic achievement.¹⁰ In addition, such schools offer less advanced coursework that could better prepare students for postsecondary educational success.

Increasing Enrollment and Persistent Segregation of MLs

After the United States lifted immigrant quotas in 1965, immigration increased dramatically.¹¹ In 1970, immigrants made up 4.8% of the U.S. population, whereas now

they make up closer to 14% of the overall population.¹² Although the percentage of foreign-born residents from Spanish-speaking nations is the highest share of immigrants among current residents, Asian immigrants have surpassed Hispanic immigrants as the largest group of new immigrant arrivals in recent years.¹³ Regardless of racial identity or nationality, evidence shows that the majority of foreign-born residents speak a language other than English at home.¹⁴ Among students, MLs make up about 10% of students in public schools.¹⁵ In 2019, students whose home language was Spanish made up 75.7% of MLs, followed by Arabic (2.6%) and Chinese (2%).

Racially and ethnically marginalized English-speaking students are often isolated in schools with high concentrations of racially and ethnically marginalized and low-income students. MLs, however, not only attend similar schools but also are often isolated in English-as-a-second-language (ESL) classes.¹⁶ This constitutes a form of within-school segregation that is associated with lower achievement outcomes and less access to advanced coursework.^{17,18} Much of this linguistic isolation stems from educating MLs from a deficit-oriented perspective. This approach views the home language of MLs as an obstacle to overcome instead of an asset to their education. Some states have gone as far as to prohibit classroom instruction in any language other than English.¹⁹ Although many of these states have reversed their prohibitions and DLI programs have become increasingly popular, a deficit-oriented perspective of MLs persists in part because of the common use of ESL programs. DLI programs, and two-way immersion (TWI) programs, in particular, represent a way to create racial, ethnic, and linguistic integration in schools.

Possibilities of DLI Programs for Integration

DLI programs provide instruction in two languages: English and a partner language, the most common of which is Spanish.²⁰ Under the umbrella of DLI, *one-way* DLI programs serve students from one linguistic group, but *two-way* DLI programs are ideally designed to enroll 50% native speakers of the partner language and 50% native English speakers. In doing so, TWI programs seek to bring together linguistically diverse student populations, which has the potential to facilitate racial and socioeconomic desegregation as well.

Not only do TWI programs have the potential to promote desegregation, but they are also a politically viable approach to doing so. As of 2022, 49 states and Washington, DC, had approved the use of a statewide Seal of Biliteracy, which is an award students can earn upon high school graduation if they have attained proficiency in two or more languages. The

widespread use of this seal demonstrates the value that nearly all states in the nation place on biliteracy. One educational model for developing biliteracy is language immersion. Although precise numbers for TWI programs are not yet available, a 2021 canvass of DLI programs indicated that there are more than 3,600 DLI programs across the United States.²¹ The five states with the most DLI programs represent both sides of the political landscape: California, Texas, New York, Utah, and North Carolina, indicating that DLI as an educational model is popular in politically and geographically diverse parts of the country.

Benefits of DLI Programs

In addition to being a politically viable strategy for promoting desegregation and integration, research consistently demonstrates the cognitive and academic benefits of bilingualism and DLI programs. In general, researchers have documented the cognitive benefits of bilingualism,²² and numerous studies find that DLI programs are related to positive outcomes in academic achievement for both MLs and native English speakers.^{23,24,25,26,27} The positive impacts of DLI programs are for language development as well as other subject areas. Although causal research has shown fewer significant effects for Black students because of the small numbers of Black students enrolled in TWI,^{28,29} descriptive research suggests there could be positive effects of TWI programs on Black student achievement.^{30,31} In addition to academic outcomes, DLI programs strive to promote bilingualism, biliteracy, and biculturalism, all of which could help facilitate positive intergroup contact and enhanced cultural competency, ultimately facilitating greater integration.^{32,33}

Challenges to DLI Programs as an Integration Strategy

Although TWI programs offer great promise for supporting students' academic success as well as promoting desegregation and integration, there are equity concerns that must be addressed. First, Black students may be underrepresented in TWI programs,^{34,35} which limits the utility of TWI programs in promoting desegregation among a broader number of historically marginalized racial groups. As the popularity of TWI programs grows, concerns exist about the gentrification of DLI programs through opportunity hoarding by white middle-class families and crowding out MLs.^{36,37,38,39,40,41} Gentrification of TWI strand programs, in which a school houses students who participate in a TWI program as well as students who do not, can lead to a school-

within-a-school—essentially creating school buildings that have two distinct and often segregated programs.

To address these potential challenges, schools and districts offering TWI programs must be proactive in ensuring equitable access to these programs. One strategy for doing so is strategically placing TWI programs in racially, ethnically, and linguistically diverse residential areas that could attract diverse groups of students. Allowing enrollment from across a larger area than traditional catchment zones, such as an entire school district, may be beneficial. Disseminating information about the academic and social benefits of TWI programs to traditionally under-subscribed students of color in accessible ways and languages could also help address this potential problem. District and school leaders should continuously monitor enrollment and be proactive in seeking to recruit a more racially diverse TWI population.⁴²

Because most programs have Spanish as the partner language, there is also a concern that the focus may be on using native Spanish speakers, often Hispanic students, as language models and prioritizing support for native English speakers, often white students, rather than prioritizing the needs of native Spanish speakers.⁴³ To address this concern, teachers and leaders must intentionally center the needs of native partner language speakers and lift up the partner language throughout the school day, including in academic instruction and nonacademic conversations.

These equity concerns, and others, underscore the need to develop and highlight best practices in TWI programs. Such practices not only facilitate desegregation—that is, bringing together students from different racial, socioeconomic, and linguistic groups in a learning environment—but also promote true integration—that is, fostering authentic, equal-status interactions among students from different groups who are experiencing fair and equitable treatment in the learning environment.

Supporting Integration in TWI Through Research

As previously described, existing research documents the short-term, long-term, academic, and nonacademic benefits of desegregation as well as the cognitive benefits of DLI programs. To connect these two often-siloed bodies of research, additional research is needed to explore (a) the extent to which TWI programs are desegregated; (b) the ways in which teachers and leaders facilitate true, meaningful integration within

racially, socioeconomically, and linguistically diverse TWI classrooms; and (c) how teachers and leaders address challenges to promoting integration in TWI programs.

TWI programs can offer one way to promote desegregation and true integration. However, additional research about and support for TWI programs are needed. An essential first step is to analyze enrollment trends in TWI programs to determine whether TWI programs facilitate desegregation. In particular, research should examine the extent to which TWI programs are desegregated for students from all racial groups. In doing so, it would be particularly important to identify programs that successfully desegregate students from multiple racial groups, especially Black students who have traditionally been underrepresented in TWI programs. Moreover, research to understand whether strand TWI programs create segregated schools-within-schools and how TWI programs affect district-level desegregation would also be valuable.

A second phase of research could explore integration within racially desegregated TWI programs. Multiple case studies of best practices could highlight the ways in which teachers and leaders facilitate true, equitable integration among students from diverse racial, linguistic, and socioeconomic backgrounds. To understand what attracts families to participate voluntarily in TWI programs and the value they place on integrated TWI programs, it would be important for research to explore the perspectives and experiences of students and parents from all racial, linguistic, and socioeconomic backgrounds.

While highlighting and sharing best practices, research could also identify the challenges to promoting integration that exist in desegregated TWI programs. For example, one potential challenge is related to TWI teachers: Many TWI programs are staffed by native partner language teachers from countries outside the United States because of bilingual teacher shortages.⁴⁴ While this offers students the valuable opportunity to learn from someone with a different life perspective and authentic exposure to a different cultural background, it is salient when thinking about the potential of TWI programs to promote integration. Because of their personal and cultural experiences, teachers from outside the United States likely have different understandings of the race relations in the United States and how to facilitate cross-race interactions and learning in a TWI classroom. Research could illuminate best practices regarding ongoing support and professional development for all teachers, especially international teachers, about historical and contemporary race relations as well as how to facilitate intergroup contact. Researching best practices and challenges related to

facilitating integration in other aspects of desegregated TWI programs, such as curriculum and pedagogy, would also be valuable.

Supporting Integration in TWI Through Policy

In addition to supporting integration in TWI through research, we propose creating a federal grant program to help schools develop DLI and TWI programs. Immersion programs are intended to have the same curriculum as traditional English-only classes, but because a large proportion of instruction is in a partner language, they often require additional funding. As mentioned above, the difficulty of finding certified DLI or bilingual teachers can force schools and districts to look abroad to staff their programs. This process can add costs to compensate third-party organizations for recruitment abroad and legal fees to help these teachers acquire and maintain their visas.⁴⁵ Much of the additional funding that supports immersion programs has gone to a district's central office to pay for these costs.⁴⁶ The need for curricular materials in the partner language is another expense. To avoid the time-consuming burden of translating existing materials into the partner language, schools or districts may choose to purchase them instead. To DLI and TWI teachers, these materials are critical to teach their students appropriately in the partner language.⁴⁷ Other potential TWI-related expenditures may include additional transportation for students, hiring district program administrators, and analyzing the demand for creating or expanding existing programs.⁴⁸ This proposed grant program would help schools and districts pay for these and other costs of DLI or TWI programs, provided they commit to using their program as a vehicle for integration. An initial funding level of \$75 million could allow multiple districts to develop TWI or DLI programs. Given the narrower focus of the proposed grant than the Magnet Schools Assistance Program (MSAP) and President Biden's proposed FY2024 budget that includes \$149 million for MSAP, \$75 million to support the development of TWI and DLI programs is an appropriate funding level to begin this grant program.

The proposed grant would award funding based on the model of the immersion program, the program's enrollment numbers, and the current combined state and local per-pupil expenditures. Although one-way DLI programs could facilitate desegregation, TWI programs should be prioritized because they inherently require a diverse body of students. The grant would offer two tiers of funding: a larger grant for TWI programs and a smaller one for one-way DLI programs. By offering a higher level of funding to TWI programs, the grant program might incentivize schools and districts to consider

developing TWI programs. Existing research on immersion programs suggests they spend an additional 4%–12% of per pupil expenditures for every student enrolled in the program.⁴⁹ We recommend awarding one-way immersion programs with 5%–10% of combined state and local per-pupil expenditures for every student enrolled and 10%–15% for every student enrolled in a TWI program. Grantees would be awarded funding for 5 years and could reapply as many times as they like once their grant expires. As part of their application process, applicants would be required to demonstrate how their program would contribute to the racial and ethnic integration of their school or district. Preference would be given to applicants who detail how they are setting up their programs to persist in the future. To distribute funds equitably among districts, multiple characteristics of districts should be considered, including locale (urban, suburban, rural), region of the country, and proportion of Title I schools. Without consideration for equity, awards may be biased in favor of wealthier districts with greater access to staffing resources, such as professional grant writers.

This grant program could be a politically viable solution because it shares some resemblance to two other federal programs: the now-defunct Foreign Language Assistance Program (FLAP) and the existing MSAP. Although FLAP no longer exists, it was passed with bipartisan support as part of No Child Left Behind. While FLAP funded schools with innovative language programs more broadly, it did not focus exclusively on DLI or TWI programs.⁵⁰ Congress has continually reauthorized MSAP since its initial authorization in 1985. The focus of MSAP is to serve as a funding source to make schools more racially and ethnically desegregated. Yet, as with FLAP, there is no particular focus on DLI or TWI programs. By sharing aspects of these bipartisan programs and narrowing the focus to creating DLI and TWI programs, we believe this policy proposal could provide a more targeted approach both to funding high-quality language programs and fostering school integration.

Conclusion

Separate bodies of research consistently demonstrate the benefits of integrated schools and DLI programs. Given the ideal enrollment of TWI programs with 50% native speakers of the partner language and 50% native English speakers, these programs could serve as an asset-based strategy for facilitating integration among students from diverse racial, socioeconomic, and linguistic backgrounds. Additional research and

funding are needed to support TWI programs in realizing their full potential as mechanisms for fostering integration.

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How Expanding Transitional Kindergarten in California Can Promote Integration

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Introduction

Although the overall public school population in the United States has increased in diversity, and a majority of students are now non-white, public schools in the United States remain highly segregated by race, ethnicity, and economic status.^{1,2} Integrated schools became the law of the nation after *Brown v. Board of Education* in 1954, but many districts were slow to integrate. In fact, many schools remained de facto segregated well into the 1960s.³ Segregation levels decreased after court-ordered desegregation measures in the 1970s, especially in the South.⁴ As within-district segregation decreased, however, between-district segregation increased, particularly in areas where school districts tended to be smaller and more numerous.⁵ This form of de facto segregation, facilitated by white flight and racist housing market practices, was more difficult to address after the Supreme Court's 1974 *Milliken v. Bradley* decision ruled against court-ordered interdistrict desegregation plans. Even within districts, many families became frustrated with busing plans, and a movement emerged that supported a return to neighborhood schools in the mid-1990s. After the peak of integration in the early 1990s, schools began to resegregate⁶ as federal oversight was gradually removed, considering integration goals met. In the most recent U. S. Government Accounting Office report, more than a third of students attended a school where the majority of students were the same race or ethnicity, and 14% attended schools where almost all of the student body was the same race or ethnicity.⁷

The academic literature supports the notion that diversity has positive political and sociological benefits for a pluralistic society. In terms of measurable educational outcomes, analyses of the desegregation plans that followed the *Brown v. Board* ruling found reduced high school dropout rates for Black students,^{8,9} as well as reductions in the probability of incarceration and increases in wages, employment, and health status.¹⁰ Researchers have also found gains in social and academic skills for students of

all racial groups who attend racially and economically diverse schools, including higher overall academic achievement¹¹ and specific gains in mathematics^{12,13} and literacy.¹⁴ More recent research notes that all students can better learn how to live in our increasingly diverse society—a skill that employers value—if they attend racially diverse schools.¹⁵

However, the modern legal and political context has made it difficult for leaders to address the challenge of current resegregating educational environments. After growing increasingly skeptical of the use of race as a criterion for achieving school balance over several years, the Supreme Court ruled in 2007 that students' race could not be used explicitly to achieve or maintain integration, striking down the continuing voluntary school desegregation efforts underway at the time in both Seattle and Louisville.¹⁶ Given this precedent, solutions to racial segregation now must be race-blind to avoid challenge in this legal environment.

Segregation in Early Childhood Education Programs

Scholars have less often focused on segregation in early childhood programs, but early childhood programs are actually more segregated than K–12 environments.¹⁷ Enrollment in publicly funded preschools has doubled in the last decade,¹⁸ but most of these programs are means-tested,¹⁹ resulting in classrooms that serve only low-income or otherwise at-risk children. Many also focus on using the non-English home languages of young children,²⁰ which can result in classrooms that are segregated by language and thus, often, ethnicity. One study of the composition of preschool classrooms found that classrooms with high proportions of students of color also had high concentrations of children from low-income households, as is often seen in K–12 schools. In this study, only 17% of preschool classrooms were both racially or ethnically diverse and had students from higher income homes.²¹ Furthermore, high-quality preschool programs are not equally accessible to families from all racial and income backgrounds,^{22,23} making integration efforts even more important to improve access for all families.

The demographic makeup of preschool classrooms has implications for young children's development. Research has found that exposure to racially diverse faces when children are young reduced implicit bias in adulthood, specifically toward Black individuals.²⁴ In an older but important study of kindergarten students, children in diverse classrooms had more early, cross-racial friendships,²⁵ which are important in the formation of later

racial attitudes. We also know that children begin to understand racial distinctions by about 6 months of age and can show racial bias as early as age 3.²⁶ Diverse, collaborative, “equal status” settings like preschool classrooms are one of the factors that help shape children’s healthy attitudes about race.²⁷ Diverse preschool environments may also better support children’s language development; one study found greater language development among students in economically diverse preschools compared to preschools that served only income-eligible students.²⁸

Furthermore, the siting of early childhood programs can help set precedents and patterns that could help integrate the K–12 schools those preschoolers will enter. Bringing high-quality early education to public schools can attract and retain families of all racial backgrounds to those schools. This is specifically possible when prekindergarten (pre-K) programs are located in public schools and even more facilitated when the programs are also administered by those districts. In Washington, DC, schools became more diverse after the district’s universal high-quality pre-K for 3- and 4-year-olds was implemented.²⁹

California’s Transitional Kindergarten Program

The creation of the transitional kindergarten (TK) program in California has changed the early childhood education landscape in that state. California’s Kindergarten Readiness Act of 2010 revised the cutoff date by which children must turn 5-years old for kindergarten entry in that year. The act established September 1 as the new kindergarten eligibility date—3 months earlier than the previous date of December 2. The Kindergarten Readiness Act also established TK, defined as the first year of a 2-year kindergarten program, for all students affected by the birthdate eligibility change. Instead of enrolling in regular kindergarten, students who had reached age 5 between September 2 and December 2 were to receive an “age and developmentally appropriate” experience in TK before entering kindergarten the following year.^{30,31} Thus, TK began to be offered in the 2012–13 school year, beginning first by serving only children with birthdays between November 2 and December 2, and gradually adding another month of eligible birth dates over the following 2 years.

To examine whether California’s TK program is effective at improving school readiness and learning outcomes for students, the American Institutes for Research evaluated the TK program as it was implemented during the 2013–14 and 2014–15 school years.³² This

study used a rigorous regression discontinuity design to examine whether TK led to positive outcomes, for which students, and under what conditions. Findings showed that TK gave students an advantage at kindergarten entry on all academic skills assessed, including literacy and math skills. This advantage was notable, given that more than three-quarters of the comparison group of students (those who just missed the birth date cutoff for eligibility) attended other center-based early childhood programs. More specifically, the study revealed that the impact of TK on student readiness for kindergarten was similar even when the program was implemented slightly differently in different classrooms; differences in student-to-teacher ratios, instructional quality, or even duration (full day or half-day schedules) did not change the program’s impact. Therefore, we surmise that the features that all TK programs have in common that also differentiate them from other early childhood programs—such as their school-based location and bachelor’s degree–level teachers with kindergarten teaching experience—are what drive TK’s impact. One of these key characteristics is the fact that the program is not means tested, permitting more diverse classrooms by race and income.

TK Expansion as an Opportunity

California is now in the midst of expanding TK to serve all 4-year-olds. The start of the 2022–23 school year marked the beginning of the expansion, a move the state legislature approved in 2021. To roll out the expansion gradually, the age eligibility window will again widen each year (adding January and February birthdays in 2022–23, March and April birthdays in 2023–24, and so on) until all 4-year-olds—nearly half a million children—will be eligible in 2025–26. This will effectively create a universal pre-K program in the state and add many new students to California’s public school buildings. **With this expansion of TK in California, districts in the state have a unique and time-sensitive opportunity to influence the racial and economic makeup of both TK programs and the schools they are located within by setting policy about where TK programs are located and how attendance boundaries are set.**

When TK first rolled out in California, serving only students in a narrow age range, slightly fewer than half of districts offered TK in one or more “hub” schools, in which eligible students from across the district attend TK and then return to their home schools for kindergarten. Creating hub schools often makes the facilities challenges of serving younger children (e.g., having bathroom facilities that are appropriately located and sized for 4-year-olds) easier for districts, because adaptations needed for the new

4-year-olds do not have to be made at all school buildings. At the time of initial rollout, an estimated 42% of districts offered one or more TK hubs within their districts. Large districts were far more likely to offer hubs than smaller districts.³³ Given their more densely populated catchment areas and potentially fewer transportation challenges, making it more feasible for families to attend a school other than the one in their neighborhood, large districts may have had more flexibility to offer hub arrangements to their students.

Decisions to create hubs versus locating TK programs in all of a district's elementary schools can have implications for the demographic makeup of students. On the one hand, establishing hubs can bring together TK students from two or more schools' catchment areas, mixing students from different neighborhoods and facilitating the creation of more diverse classrooms. This could work particularly well if districts are strategic about the placement of hubs. For example, in a hypothetical district where the south side of the district is predominantly one particular race and the north side is another, siting one TK hub in the north and one in the south would perpetuate the existing segregation of schools, whereas siting them more in the east and west, where they draw students from both racial groups, could interrupt those historical patterns and create more diverse schools. On the other hand, offering TK in all elementary schools could make it easier for all eligible families to access the program by reducing travel burden and enticing new families previously uncommitted to their neighborhood public schools to enroll their children to take advantage of the free, high-quality, research-supported program. Bringing new families into public schools in California through TK may help add diversity to those schools, as it did in Washington, DC.

Next Steps for Districts

Decisions about where to locate TK classrooms—in hubs or in all schools—may play out differently in different district contexts. Gilroy Unified School District (USD), for example, which has a large, diverse overall student population, currently uses a hub model for TK. Like many California districts, Gilroy is majority Latine, with 60% of its population Latine students, and 40% non-Latine. However, residential segregation is notable in the city; according to a recent study from UC-Berkeley,³⁴ two of the 10 most segregated Latine neighborhoods in the entire Bay Area are in Gilroy. In 2021–22, Gilroy USD offered TK at two of its seven elementary schools, and in 2022–23, as the program began its expansion, they introduced TK at a third school.³⁵ Each of these schools has

slightly different demographic makeups, providing access to TK for all families while also encouraging diverse classrooms. Similarly, in Davis USD, hubs have been intentionally located such that two schools' regular catchment areas feed into each TK hub, again promoting the mixing of students from different neighborhoods toward more diverse classrooms.

In some districts, on the other hand, the most important consideration may be easy access to TK for all families, so districts may prioritize offering TK in every elementary school. In addition to prioritizing access for all families to the high-quality program, this strategy also may offer some benefits in terms of creating more diverse schools. Offering TK in every elementary school can (a) make the program more easily accessible to all families and (b) attract parents to neighborhood schools for a free, high-quality, research-supported preschool program that they might otherwise have to pay for. A study of New York City white families found that parents were bothered by segregation within and among schools, but they were simultaneously anxious and concerned that their children access the "best" (often interpreted as mostly white) schools.³⁶ A high-quality early learning experience could help incentivize these parents to remain committed to their neighborhood public schools, and this retention could support continued diversity.

In addition, districts like Gilroy and Davis that use a hub model have a chance to rethink the attendance areas of those schools as the number of schools offering TK increases. Structuring attendance areas intentionally can create more racially diverse TK programs and schools as a whole. Restructuring catchment areas will have to focus on income rather than race to survive in today's legal context, but in California, race and income are still, unfortunately, highly correlated; Hispanic families are more than twice as likely as white families to live in poverty, according to the California Poverty Measure, which is "an approach to gauging poverty in California that accounts for geographic differences in the cost of living, factors in tax credits and in-kind assistance that augment family resources, and subtracts medical, commuting, and child care expenses."³⁷ Hubs also provide districts with other opportunities for establishing mechanisms that can potentially promote integration in the later grades, such as extending the shared transportation resources that could bring students from different neighborhoods into a hub to grades beyond TK.

Even in districts without TK hubs, district leaders will have the opportunity to make decisions about attendance adjustments. As TK expands, more students will be entering elementary school buildings around the state. With this increase in student population, district leaders may have to adjust attendance areas to ensure that no school is overcrowded or severely underfilled. At those decision points, leaders can choose either to perpetuate existing patterns of segregation, or take steps to create more integration opportunities.

California's state and district leaders have a unique opportunity to make changes at this time, not only because TK expansion has just begun to roll out, but also because of patterns of declining enrollment in many California districts due to emigration out of high-cost areas and often out of the state entirely. In addition, families made different decisions about early childhood education during the COVID-19 pandemic, which have lingering effects today. Kindergarten is not mandatory in California, so many parents chose not to send their rising kindergartner to school in 2020, knowing that virtual kindergarten would provide neither needed child care nor a quality early educational experience for their child. When private schools began offering in-person education sooner than public schools did, many families who could afford to do so sent their kindergartners to those private schools. And many stayed in those schools, not returning to public schools after that kindergarten year.³⁸ Because private schools and those families that can afford to choose them tend to be substantially less diverse than public schools,³⁹ this exodus is impacting public school demographics. Given these circumstances, it will be even more critical to attract families of young children to public schools.

Next Steps for Research

Given that different strategies for selecting the location of TK classrooms as the program expands can have different implications and outcomes in districts with varying circumstances and demographics, more information is needed to understand these relationships. Additional research can help inform strategic decisions. A landscape study quantitatively examining relationships between districts' policies on TK program locations and school and overall district demographics would be a useful starting place. Such a study could be expanded to include in-depth interviews with district leaders to better understand how they are choosing the location of TK classrooms, and to what extent they are considering classroom integration a priority. Parent voices are also

critical; focus groups with families can help us better understand their decisions regarding whether and where to enroll their students, and whether and how diversity is a factor in those decisions. From these interviews, case studies of districts that have strategically located TK programs to attract diverse families to their schools may be created to help other districts interested in fostering integrated environments consider next steps.

Conclusion

Prior research has documented the impact that TK has on children’s kindergarten readiness skills. We also know, although it has been less emphasized and studied, that integration in early childhood education environments is critical for children’s development. California is just embarking on an expansion of the TK program to include all 4-year-olds, phasing it in over the next 4 years. Thus, California’s districts have a unique and time-sensitive opportunity to be intentional and strategic about their TK decisions—such as how attendance areas are drawn and where TK hub programs are located—as the program expands. This would help expand access to high-quality early childhood education, foster families’ continued commitment to diverse schools into later grades, and create solutions for racial segregation while remaining race blind.

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