Addressing Education’s Most Challenging Issues:

NEW SOLUTIONS DRIVEN BY RESEARCH, INNOVATION, AND COLLABORATION

HARVARD

GRADUATE SCHOOL OF EDUCATION
Introduction

The education sector is under a microscope. From persistent achievement gaps, to mounting student debt, scandals in college admissions and critical teacher shortages, there are a number of significant challenges facing education, and no simple, meaningful solutions. What we know is that even in the best schools, with the most resources and highly qualified teachers, many students are struggling. Education is the key to opportunity and progress, but it must be inclusive of all demographic groups, income brackets and zip codes. Students, parents, practitioners and academics alike are left with the question of where we go from here.

While the obstacles that are before us in education are significant, they are not intractable. New approaches to support students from cradle to career shed light on how we can make education more equitable, accessible and successful for all. Education issues can be divisive, and we will struggle to find common ground without a common set of facts, evidence, and information about the range of contexts and learners we need to serve and the supports that will help them.

Solving the most challenging issues in education is possible through rigorous research, innovative new practices grounded in evidence, and collaborations among schools, policymakers, and the community. What we should be asking is, what works for whom, and in what context? On the following pages, we'll explore new approaches and insights into some of the biggest issues facing education today and highlight how these strategies can improve student outcomes and opportunities while driving policy and practice.
While education remains the key to opportunity and progress, the current system is failing far too many of our students. We know the stakes are incredibly high, but regardless of the obstacles before us, there is hope — and we are well-positioned to pivot, adapt, and partner in new ways to drive the meaningful change that is so desperately needed.”

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Dean
Saris Professor of Education and Economics
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A Look at Some of the Problems We are Working to Solve

We’re not starting with an even playing field for our youngest learners. At just 3 years old, children from low-income families have been exposed to 30 million fewer words than their more affluent counterparts.\(^1\)

Despite continued education reform efforts, the achievement gap remains wide. A recent study from Education Next indicated that the socioeconomic achievement gap — the disparities in performance of students in different economic classes — has remained unchanged over the past 50 years.\(^2\)

While low-income and first-generation students are being admitted into colleges, there’s a need for greater support to improve persistence. One longitudinal study following a cohort of students from 2009 to 2016 found a 50% gap in students enrolled in postsecondary education — while 78% of students with high socioeconomic status were enrolled, only 28% of their peers with low socioeconomic status were pursuing higher education.\(^3\)
What’s Included...

1. Our model for early education is based on research from the 1960s. A groundbreaking study on early education is underway to inform policy based on current realities and recreate the system at scale.

2. Most education decisions are made based on ideology. Research fellows are turning to hard data to identify evidence-based solutions to pervasive issues facing districts in the U.S.

3. For kids in the U.S., access to opportunity depends mainly on their parents’ income. A new model for success is aimed at supporting all children from cradle to career in and outside of the classroom.

4. College admission is not the finish line when it comes to equity and inclusion. New research highlights barriers to success for first-generation and low-income students once they get on campus.

5. Today’s students require greater social-emotional support. Unfortunately, the professionals trained to provide that support — school counselors — are drastically under- and misutilized in schools.
Children’s brains develop rapidly well before they enter elementary school. Decades of research document that the first 60 months of a child’s life comprise a “sensitive period” of language, social-emotional, and cognitive skill development, laying the neural architecture for life. At the same time, families rely on high-quality child care in order to work, study, and contribute to their communities.

For decades, early education decision-makers have relied upon findings from studies conducted in the 1960s and 1970s, many of which focused on models that would be considered multi-component, intensive, and mostly small-scale. A new, more robust science is needed – one that can provide answers to complex questions about how to build and sustain systems that are relevant, high-impact, and designed to promote all children’s healthy growth and development.

The Saul Zaentz Early Education Initiative at the Harvard Graduate School of Education, led by co-directors Nonie Lesaux and Stephanie M. Jones, was launched to advance quality across the system through three related strategies:

1. A breakthrough longitudinal research study that identifies the everyday micro-features that fuel children’s growth in early education settings
2. A model of executive education to build capacity among professionals in the field
3. A pipeline of a new generation of leaders, cultivated through a Harvard graduate student fellowship program

These transformative approaches inform a scaling strategy that supports leaders around the world to get to meaningful early learning experiences that give children a developmental boost in the years before formal schooling begins.
Today, more than 75% of 3- and 4-year-old children currently spend time in some type of early education setting, which range from universal pre-K programs to informal home-based care environments.
Educators are the cornerstone of the high-quality early learning environment. But too often, professional development in the early education space focuses solely on strategies to support children’s learning and growth and skips over the essential knowledge adults need to lead and nurture relationships among their peers. In response to this need, the Zaentz Initiative created the Professional Learning Academy, a bold, innovative strategy to bring executive education to the field of early education.

The Professional Learning Academy, which includes the online Certificate in Early Education Leadership (CEEL), equips early education leaders with the knowledge, tactics, and networks they need to lead learning environments. Organized around the science of adult learning, leadership, and early development, the Professional Learning Academy engages leaders at all levels of the early education system – policymakers, directors, administrators, and educators – to build core knowledge about topics like adaptive leadership, effective teams, and buffering stress and trauma.

CEEL, in particular, continues to provide early education leaders with rich opportunities to build community, engage in collaborative problem-solving, and gain new strategies and tools to navigate times of challenge and change.
A Ground-Breaking Study of Current Conditions

To bridge the gap between research on early childhood as a sensitive developmental period and the everyday decisions and major investments of public policymakers and other leaders, Professors Stephanie Jones and Nonie Lesaux launched the Early Learning Study at Harvard (ELS@H). ELS@H is a large-scale, population-based, and longitudinal study of young children’s learning and development that explores and documents the features of the settings in which young children receive their early education and care. Drawing on approaches in public health research, the ELS@H sample of participants is representative of the population of 3- and 4-year-olds living in the Commonwealth of Massachusetts. It is also representative of the major care types – both formal and informal – that families use. The study focuses on questions about scaling effective models and practices as well as the characteristics of early education and care settings that are connected to children’s long-term health and well-being.

Currently, the ELS@H team is collecting data to better understand the unique stressors facing families, children, and providers as a result of the COVID-19 crisis.
The Zaentz Initiative released the first ELS@H results in November 2018, revealing the types of learning and care settings where Massachusetts 3- and 4-year-olds spend their time. The data showed that licensed center-based care was by far the most common care type used by families across the state (32% of children), followed by parent/guardian care and unlicensed relative care (17% each). The two least common care types were Head Start (5%) and licensed family child care (2%). In addition to identifying overall trends across different categories of care, the study also examined the characteristics of children and families who use different types of care with a special focus on the distinction between formal settings, such as private child care centers, and informal settings, such as family child care. Results indicate that the patterns of early education and care use for 3-year-old children were distinct from the patterns for 4-year-old children, with 4-year-olds more likely to be enrolled in formal care only and less likely to be enrolled in informal care only. Finally, while parents participating in the study generally reported high levels of confidence in their children’s early education and care, they also expressed concerns about their children’s futures, including concerns about their academic future, social-emotional well-being, and physical well-being.

These foundational results represent a first step toward developing a new science for a new era of policymaking and practice. Looking ahead, the Initiative will focus on identifying how specific features of the early education and care environment define children’s earliest experiences and impact their trajectory for years to come. Ultimately, what we learn about these features will help inform scalable solutions that best complement our nation’s rich diversity and complex mixed-delivery system.
We are learning more about the entire early education and care landscape than we have in decades. What we’re really interested in are the ‘key ingredients’ for high-quality early education settings, and how those could be scaled more broadly.

Nonie Lesaux
Academic Dean
Juliana W. and William Foss Thompson Professor of Education and Society
Harvard Graduate School of Education
CHAPTER TWO
Helping Schools Use Their Data to Address Core Issues in Education

Data analytics has taken hold in almost every industry, informing how businesses operate and how leaders make decisions, but it has largely been absent from the education space. While most educators make decisions based on ideology, even the most simple advances have created opportunities for education leaders and researchers to collect and use data to improve the lives of students.

To fill this gap in education, faculty members in the Center for Education Policy Research (CEPR) at Harvard University formed the Strategic Data Project (SDP), an initiative that was created based on three fundamental principles:

- **Policy and management decisions can directly influence schools’ and teachers’ ability to improve student achievement.**
- **Valid and reliable data analysis significantly improves the quality of decision making.**
- **Building an agency’s internal capacity to conduct rigorous data analysis is critical to producing and sustaining evidence-driven decisions.**
U.S. education invests $1.8 billion per year on student assessments, but school districts don’t know how to use testing data to improve their own programs. In the last 10 years, the Strategic Data Project has supported more than 300 data strategists at over 140 school systems and organizations across the country. Our fellows are helping organizations move beyond ideology and ‘expert opinion’ to learn what’s really working for their students.”

Tom Kane
Walter H. Gale Professor of Education and Economics
Harvard Graduate School of Education &
Faculty Director
Center for Education Policy Research

A SOLUTION:
Placing Data Scientists in the Field to Drive Change

Since 2008, SDP has supported more than 300 data strategists (known as SDP fellows) at more than 140 school systems and education organizations across the country. With fellows working directly alongside community and school leaders, SDP is able to uncover new trends and solutions, enabling districts to build their capacity to use data for effective decision-making. SDP fellows study data throughout the education spectrum.
The role of substitute teachers is vital within our school system to provide continuous support for teachers and students. In large school districts — such as Chicago Public Schools (CPS) — the amount of daily requests for substitute teachers can hit the thousands. In the 2017-2018 school year, the average number of requests was over 1,700, an increase from the previous year. However, the fill percentage dropped, leaving an average of 350 substitute requests unfilled each day.

Looking closely at the data, SDP Fellow Megan Lane, Ph.D. identified that while there wasn’t an issue with the pool of substitutes, the substitutes were finding and frequenting preferred schools, leaving a subset of schools — particularly those with high needs — with a revolving door of different substitutes or no substitutes at all.

To address this issue, the district incentivized substitutes toward high-need schools with an increased stipend in order to see a more even dispersal of coverage. The stipends were successful in increasing fill rates in high-need schools, however shifting behaviors across the district caused the overall fill rate to drop in the 2018-2019 school year. Lane recommended continuing the stipend, and additionally offering benefits to subs who meet a minimum frequency criteria to incentivize substitutes to take on more assignments overall. A number of other recommendations were also made to address coverage on high-demand days, increase the pool of available subs, empower subs to improve the culture of subbing, and reduce the amount of teacher absences.

Ultimately, the data analysis helped to identify and hone in on a problem and uncover a promising solution by incentivizing substitute teachers to work in high-need schools. Going forward, Lane and her team will look at the impact of teacher absences on student achievement.
If you look at a traditional classroom today alongside a photo of one from 50 years ago, you’ll see that at the highest level, not much has changed. Students are still lined up in rows, being instructed with the same curriculum, in the same way, regardless of their needs. Even after nearly three decades of continuous school reform, we still have a clear correlation between socioeconomic status and educational achievement and life outcomes. In order to drive change in this environment, it’s essential to change the mindset about how we care for children to consider the challenges students are facing outside of schools.

In 2014, Paul Reville, Francis Keppel Professor of Practice of Educational Policy and Administration at Harvard Graduate School of Education and former Secretary of Education for the Commonwealth of Massachusetts, launched the Education Redesign Lab (EdRedesign) at HGSE. The mission of EdRedesign is to give every child in the United States the opportunity to succeed in education and in life, with the hope of leading a movement to create a new, more comprehensive education model. Overcoming widespread inequity in child development, educational support, opportunities and outcomes requires dramatically redesigning, aligning, and integrating systems of development and education for all children and youth.
EdRedesign is working to build a silo-breaking, 21st century education engine to restore social mobility and ensure that all children can reach their full potential. Part of this effort is building a new education and child development system by bringing together previously disparate groups within each community.

In 2016, EdRedesign launched By All Means, an initiative aimed at addressing the correlation between a child’s socioeconomic status and his or her prospects for educational achievement through several strategies: research and dissemination, policy and advocacy and field work in seven communities. The field work is the crux of the program, supporting local communities as they create cross-sector systems of child well-being and education. Throughout each of the nine communities, mayors, superintendents, leaders in public health and others come together to identify gaps and build wraparound supports to ensure children are given the best chance to succeed in and out of the classroom.
Since 2016, the City of Salem, Massachusetts, partnered with the EdRedesign’s By All Means initiative. In collaboration with City Connects, a Boston-based organization that implements individualized plans to meet the needs of students, Salem and EdRedesign have created personalized Success Plans for every pre-K-8 child in the city.

The plans bring together families, school staff, and the community to address student needs, leverage services and opportunities, build connections and improve student outcomes. As a result, new services have been offered to level the playing field for students, including health care, after-school programming, and behavioral health counseling.

The City Connects model has made substantial impacts not just on student outcomes but also on teachers and administrators. Through the creation of individualized plans, teachers are developing more empathy and understanding of their students and building stronger relationships with them. Quantitative analysis has shown a narrowing achievement gap among students enrolled in City Connects programs.
Education is a community system in Salem. We collaborated with the Education Redesign Lab for this citywide campaign to address the myriad needs of our children. We want to ensure that every child in our community has the supports and opportunities she or he needs to succeed in academics and in life.”

Kim Driscoll
Mayor
Salem, Massachusetts
For years, higher education institutions across the U.S. have worked to increase diversity on campus and bring in more low-income students. This effort is critical in improving equitable access to education for all, enriching the educational experience and creating a competitive, diverse workforce to drive our economy forward.

While making a dedicated effort to accept more low-income students is, on its surface, a step in the right direction, if you go a little deeper, it’s evident there are some flaws in how this process is executed.

And getting in isn’t even half the battle.
The Reality of Low-Income Students in Higher Education

Anthony Abraham Jack, an assistant professor at Harvard Graduate School of Education, recently explored how low-income students acclimate and are treated at higher education institutions in his book, *The Privileged Poor: How Elite Colleges Are Failing Disadvantaged Students*, published by Harvard University Press. Jack identified two distinct populations of low-income students on campus. The “privileged poor” are low-income students who attended boarding or preparatory high schools before coming to college. The second group is the “doubly disadvantaged,” or low-income students who attended their local public high schools, with far fewer resources to prepare them for post-secondary education. The doubly disadvantaged often describe feeling isolated and out of place on campus, especially when navigating interactions and relationships with faculty and staff.

**Privileged Poor** *(noun)*

Low-income students who attended prestigious, private, boarding or preparatory high schools before coming to college.

**Doubly Disadvantaged** *(noun)*

Low-income students who attended often under-resourced public schools.
Through Jack’s research, he found that although these universities are accepting low-income youth and working to diversify their student population, they recruit their low-income students from the same schools as their affluent ones. About 50% of low-income students were among the privileged poor. So, universities are essentially bringing in bankable students who are “safer” choices than their peers who may have had a traditional high school experience in a low-income community. What’s more, once these students get to campus, they are not being properly supported through this life-altering transition.

For example, Jack found that only 1 in 4 institutions that adopted “no loan” financial aid packages kept their dining halls open during spring break, which can mean facing food insecurity—the reality of not knowing where their next meal is coming from—for a week while their peers are vacationing or visiting home. Many of these first-generation low-income students do not have the opportunity to go home, and one step further, are expected to continue to help support their families while they are studying, going to class, or participating in a work study program or part-time job.

Among the doubly disadvantaged, there is also a gap in expectations about what is required to succeed in college. In connecting with students, Jack found that many believe connecting one-on-one with a professor after class or during office hours is perceived as brown-nosing, and have a limited understanding of how it can dramatically enhance their experience, expand their network and improve performance at school.
Potential Solutions to Level the Playing Field

Jack points to a number of options for improving the experience of the doubly disadvantaged on campus, as well as opening opportunities to more low-income students and truly increasing diversity. Government investment in poor communities is essential to creating a stronger cohort of students prepared to transition to higher ed.

As for the higher education institutions, looking at current policies and practices on campus from the lens of disadvantaged students is critical. Simple cultural changes such as explaining what office hours and other taken-for-granted terms are, to keeping dining halls open during spring break, to examining work study programs or policies that may not be providing these students with enough opportunity to succeed are a step in the right direction to making these universities more equitable and realizing the promise of a diverse student population.
Today’s educators are faced with supporting their students’ increasing social-emotional needs. Between grappling with issues such as gender identity, homelessness or school violence, students require support beyond the classroom, and no professional is better trained and equipped to handle these issues than the school guidance counselor.

Unfortunately, the reality is that most school counselors are stretched thin and overworked — and often not with the type of work they are best trained to do. According to the American School Counselor Association, the average student-counselor ratio is 491:1, and in some states, that ratio is even higher. Take Arizona at 924:1 — the average student is competing with nearly a thousand other students just to get a counselor’s attention.5

Mandy Savitz-Romer, Nancy Pforzheimer
Aronson Senior Lecturer in Human Development and Education at the Harvard Graduate School of Education views counselors as an essential component to ensuring a student’s success, and her new book, Fulfilling the Promise: Reimagining School Counseling to Advance Student Success, explores what it will take to reinvent the field.

1.7 million
students attend a school with a sworn law enforcement officer but not a counselor.6
A Strategic Approach to School Counseling

Savitz-Romer acknowledges that the numbers are just part of the problem. Putting more counselors into outdated roles will not give students the opportunity to thrive inside and outside of school. What students need are counselors who can provide holistic, wrap-around supports to connect and coordinate services and serve as an “academic home.” This approach ensures that students remain a first point of contact, can provide as much care as possible and create a network of support so students don’t fall through the cracks.

In order to make this type of support a reality, strategic and systemic change is needed to break down barriers that have made it challenging for counselors to perform in their counseling roles. Savitz-Romer calls for school counseling reform and collaboration among school leaders, district leaders, legislators, and other key stakeholders.

Considerations for school districts include bringing clarity to the role of counselors — establishing vision statements, reviewing hiring practices and revising evaluation tools. For school leaders, taking a close look at what school counselors are doing and how to provide more professional development is critical. Take for instance, a counselor in a low-income school district who is tasked with supporting students experiencing homelessness, trauma or dropout — the needs here will be far different from a school in a more affluent district.

Policymakers have the opportunity to create new guidelines to ensure that counselors are being used effectively in schools to meet the increased social-emotional needs of students. For example, in Kentucky, counselors are required to spend 80% of their time working directly with students, rather than administering tests or covering classrooms.

A collaborative approach to redefining the role of school counselors will create a more equitable, supportive and effective system for students to thrive in and outside of the classroom.
LOOKING AHEAD

Fostering Meaningful Improvement in Education

The significant issues explored in this eBook reveal how much work is left to be done to realize the true potential of our education system. From radically rethinking early education to ensuring that low-income students have their needs met on college campuses — the problems are daunting, but promising solutions exist. We must bring these issues to light in order to start moving in the right direction.

Our goal at the Harvard Graduate School of Education is to continue addressing today’s problems in education by preparing education leaders, researchers, and innovators; generating evidence to improve outcomes; and engaging the field in partnership and convenings. We know the work isn’t easy, but we are prepared and eager to take on the challenge. Every day, we see reason for hope, for change, and for breakthroughs. Our partners, faculty and students are passionate about finding what works in education and applying it to real-world problems. They stand ready to throw out the rule book and challenge the status quo.
Sources


