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More than 44,000 national service members provide in-school and after-school support to at-risk youth, serving in almost 12,000 schools, including 1 out of every 4 low-performing schools and 1 out of every 10 charter schools.[1] An under-recognized source of energetic, committed human capital support for youth, national service members help communities implement locally determined, cost-effective, evidence-based solutions to improve student outcomes. They undergird important reform efforts, while providing a source of "near-peer" role models and mentors. If this resource were more widely available to low-income communities, we could dramatically reduce the educational disparities that leave too many students without the educational foundation they need for success in life.

The Human Capital Gap in Low-Income Schools

American education today, like many facets of American society, presents a wide opportunity gap. While many public schools successfully educate K-12 students, too many others do not – including a disproportionate share of those serving predominantly low-income, minority, special education, and homeless students.

The reasons for this gap are many. Some have to do with structural factors best addressed through systemic reforms. Some have to do with quality and availability of instructional resources – such as curricula, technology, and educational supplies. But many are essentially human capital challenges: shortages of high quality teachers and a limited capacity required to address complex student needs effectively. As a result, too many schools are unable to meet students' social-emotional needs, personalize learning, and provide critical supports to low-income students that more affluent families can afford.

The important role that adults play in the lives of youth,

while long understood, has been dcoumented in recent research that demonstrates that increasing the adult-to-youth ratio in a neighborhood by 1% results in a decrease in the dropout rate by 1%.[2] Adults in a community establish norms, values, and social opportunities and constraints that youth often need in order to achieve academically and stay on a pathway to success. Schools are not the only source of adult support for youth – families, faith institutions, coaches, youth organizations, and even employers often provide valuable support. However, where such community supports are limited, schools may need to engage more adults to fill the gap if they are to educate students from less-advantaged backgrounds successfully.

This paper explores seven roles that national service programs, particularly AmeriCorps, play in providing additional human capital to support student and school success as teachers, tutors, extracurricular providers, and in other roles, discussed below.

> AmeriCorps is the name given to a set of programs authorized under the National and Community Service Act of 1990 and the Domestic Volunteer Service Act of 1973 and administered by the Corporation for National and Community Service and State Service Commissions. These programs mobilize adults to serve full-time or part-tme to meet locally determined community needs. All AmeriCorps members who complete their term of service receive an education award that can be used for higher education expenses, including graduate school, or to pay back student loans.

The largest program, the National Service Trust Program, provides grants to local organizations competitively selected by state commissions or national organizations chosen through a peer-reviewed competitive process

by the Corporation for National and Community Service – the federal agency that administers AmeriCorps and Senior Corps. Every federal dollar is matched by grantees, and in 2015, CNCS generated $1.26 billion in outside resources from private businesses, foundations, and other sources – an amount exceeding the federal appropriation.[3] All grantees must specify performance measures and report their results against these goals. All programs must be evaluated, and increasing numbers of programs have attained a moderate or high level of evidence, which is taken into consideration in the competitive process.]

Roles

A. Teachers

Extensive research has demonstrated the importance of teacher quality on student achievement, social and emotional development, and persistence to graduation.[4] Students assigned to highly effective teachers will also be more likely to attend college, attend higher-ranked colleges, earn higher salaries, live in higher socioeconomic status neighborhoods, and save more for retirement.[5]

Unfortunately, districts across the country are experiencing signficant teacher shortages, particularly in special education, mathematics, science, and English learning education, and in locations with lower wages and poor working conditions.[6] Shortages are projected to grow based on declines in teacher education enrollments coupled with student enrollment growth, efforts to reduce student-teacher ratios, and ongoing high attribution rates.[7]

None of these teacher shortages is likely to be filled through traditional methods. In a 2016 national survey of college freshmen, the number of students who said they will major in education reached its lowest point in 45 years. Just 4.2% intended to major in education, compared to 11% in 2000.[8] Experts predict the annual teacher shortfall could grow to 112,000 teachers by 2018.[9] Districts report a variety of methods for addressing their shortages, including filling vacancies with teachers with emergency/temporary credentials or long-term substitutes, increasing class sizes, or cancelling courses altogether.[10]

In addition, the demographic makeup of the US teaching force does not reflect the racial and ethnic backgrounds of much of the population of students they teach. Although the number of minority teachers more than doubled in the United States over a 25-year period, they still represent fewer than 20% of teachers, while more than half of students are not white.[11] A growing body of literature suggests the importance of recruiting teachers of color, as a student-teacher demographic mismatch is related to outcomes such as lower student test scores and negative teacher assessments of student behavior and ability.[12] In fact, a recent study by a Johns Hopkins University economist found that low-income black students who have at least one black teacher in elementary school are significantly more likely to graduate high school and consider attending college. The same study found that having at least one black teacher in third through fifth grades reduced a black student's probability of dropping out of school by 29%. For very low-income black boys, the results are even greater – their chance of dropping out fell 39%.[13]

To address these challenges, there is a need to expand the pipeline of talent pursuing teaching.[14] Alternative teacher preparation programs are playing an important role in increasing the number of qualified diverse individuals available to teach, often in collaboration with traditional preparation programs. While alternative preparation programs vary widely in quality,[15] these programs provide an essential pool of diverse teachers. According to the National Center for Education Information's 2011 "Profile of Teachers in the U.S.," the share of teachers who came from alternative programs grew from almost nothing in 1980 to 39% in 2011 – and those teachers from alternative paths include a much higher share of black and Hispanic teachers. One-third of the new teachers hired between 2005 and 2011 came from an alternative program.[16]

> Experts predict a teacher shortage of more than 100,000. The number of students who said they will major in education reached its lowest point in 45 years. One-third of the new teachers hired come from alternative programs, including more than 9,000 prepared each year through AmeriCorps-affiliated programs.

A growing number of these teachers – currently, more than 9,000 teachers annually – are prepared through highly selective alternative teacher preparation programs that provide participants AmeriCorps Segal Education Awards, which provide funds that can be used to pay back student loans or fund graduate degrees.

For example, Urban Teachers, an AmeriCorps affiliate program, uses an evidence-based system to select and prepare a diverse and highly selective group of individuals to teach in Baltimore, Washington, DC, and Dallas schools. While only about a quarter of traditional teacher preparation programs routinely gather information on the performance of their teacher candidates,[17] extensive feedback is central to Urban Teachers' multifaceted theory of change, which combines a rigorous selection process and intensive training and support – including 1500 hours of clinical experience and 3 years of instructional coaching – with continual evaluation of performance as the basis for feedback, support, improvement, and accountability. Teachers trained by the program, which partners with Johns Hopkins University to enable participants to earn a master's degree in education, now serve in 160 public and charter schools, including one in four Baltimore schools. In 2016, Urban Teacher residents are 58% people of color, 38% first generation college-goers, and carry an average GPA of 3.3.[18]

Teachers trained by Urban Teachers, an AmeriCorps affiliate program, serve in 160 traditional public and charter schools, including one in four Baltimore schools.

AmeriCorps Segal Education Awards, as well as loan forbearance during the term of service, play important roles in supporting high potential individuals from lower-income backgrounds to afford to enter the teaching profession, thereby increasing the number of teachers who reflect the backgrounds of students from low-income families. Attracting corps members with diverse backgrounds can be uniquely challenging,

given pressures to pursue more lucrative career options. AmeriCorps membership provides the "added financial security and credibility that applicants and families need to choose service over other career opportunities."[19]

In addition, designation as an AmeriCorps program attracts applicants with a strong ethic of service. Motivation to teach is an important determinant of teacher persistence and growth mindset, both connected to teacher and student performance.[20] For this reason, Urban Teachers focuses on screening for high-achieving, mission-driven individuals who seek to serve the students who need them the most and exhibit a love of learning and persistence – the elements of a growth mindset that will enable them to persevere as they develop their teaching skills. Participation in AmeriCorps as an affiliate program aligns with Urban Teachers' approach to recruiting individuals with this profile.

"Our affiliation with AmeriCorps was a big factor in recruiting our new cohort. The AmeriCorps brand has national recognition, so in places where Urban Teachers is not well known, the AmeriCorps brand carried a great deal of weight in giving credibility to our program. In addition, our affiliation helps us to recruit alumni from other AmeriCorps programs. People who have previously had positive experiences with AmeriCorps through CityYear, Reading Partners, Literacy Lab, Jumpstart, and Playworks are an excellent fit for the Urban Teachers program, and we are increasingly successful in recruiting individuals who have had these AmeriCorps experiences. The financial benefit of the Segal Education Award is an important factor in recruitment, as well, especially with the cost of the Master's degree from Johns Hopkins University."

Urban Teachers

Other AmeriCorps programs help to address teacher shortages by creating a pipeline of future teacher talent by providing an important source of diverse recruits. For example, 45% of Citizen Schools Teaching Fellows, an AmeriCorps program, express intent to pursue teaching pathways and the program has developed a set of

relationships with universities to allow Fellows to receive certification and find placement in local public schools. As a result, 80% of Citizen Schools Teaching Fellows remain in the education sector after their two year fellowship ends. Similarly, a 2015-2016 survey found that 45% of City Year AmeriCorps members were interested in pursuing a teaching career at the end of their service through both traditional and alternative preparation programs. Urban Teachers has found former City Year corps members to be such strong teachers it pre-approves City Year corps members' applications to join its rigorous program.[21] City Year has developed similar partnerships with universities across the country, giving AmeriCorps members and alumni access to exclusive scholarship opportunities and benefits to enable them to pursue their degree in education.[22]

Finally, AmeriCorps programs provide a steady source of leaders who are committed to ensuring equitable access to a high quality education for all students and leveraging numerous approaches to do so. In fact, a 2011 study by researchers from the Harvard Graduate School of Education and the American Enterprise Institute concluded that "more founders and top leaders of entrepreneurial education organizations started their careers with Teach For America than anywhere else."[23] Among more than 50,000 Teach For America alumni, some 83% report working in education or other capacities serving low-income communities. Teach For America has contributed 1,120 principals, 360 school system leaders, 150 elected public officials, 500 policy, organizing, and advocacy leaders, and 190 social entrepreneurs, with another 1,000 social entrepreneurs in the pipeline.[24] Teach For America alumni Include Urban Teachers founder Jennifer Green, KIPP founders Dave Levin and Mike Feinberg, Louisiana State Superintendent John White, and former Chancellor of District of Columbia Public Schools Kaya Henderson, along with the majority of her cabinet.[25]

The reasons for this like in the national service experience. According to Teach For America, "Armed with the firsthand experience of teaching in underserved schools, alumni work from inside and outside education to address the deeply rooted systemic issues that create so many extra challenges for students, teachers, and schools in low-income communities."[26]

Teach For America's theory of change embraces this outcome: "Teach For America aims to contribute additional leaders to the growing movement to end educational inequity. Our commitment starts with developing teacher leaders who offer their students the opportunity to attain an excellent education and continues through the work our alumni pursue across education and related fields. We drive change through leadership, ultimately with and for the sake of our students, both inside and outside the classroom."[27] This theory is supported by quasi-experimental research by Cecilia Mo and Katharine Conn that shows that teaching as a corps member has a powerful influence on alumni's understanding of the political and social forces that contribute to educational inequity, reduces prejudice, and increases connectedness to disadvantaged communities.[28]

> **Teach For America,** an AmeriCorps program, has contributed 1,120 principals, 360 school system leaders, 150 elected public officials, 500 policy, organizing, and advocacy leaders, and 190 social entrepreneurs.

While Teach For America, the largest and oldest alternative teacher preparation program, is the most prolific generator of future leaders, other AmeriCorps alumni have gone on to increase equitable access to a high-quality education by serving in schools, school systems, states, local government, the federal government, the nonprofit sector, and much more. "Still Serving: Measuring the Eight-Year Impact of AmeriCorps on Alumni," a rigorous evaluation about AmeriCorps' long-term impacts on members finds that AmeriCorps alums continue to be highly civically engaged and enter public service careers at a rate of 60% — a significantly higher rate than a similar comparison group.[29]

> **60% of AmeriCorps** alums enter public service careers.

B. Supporting Students' Social-Emotional and Academic Development

School climate – in which students are safe, supported, and motivated to learn – is widely understood to be essential for student success.[30] Schools in which large numbers of students have experienced poverty-related trauma, or toxic stress, often struggle to maintain a learning-focused culture that effectively nurtures students' social-emotional and academic development. As a result, school leaders and staff report pervasive challenges, including disruptive student behavior and discipline, student attendance, student engagement, and student depression.[31]

Dr. Robert Balfanz of Johns Hopkins University argues that in response to these challenges, "schools and their districts have typically put in place what amounts to standard operating procedures to address the poverty challenge. These include grade retention, class size reduction, test prep, and an ad hoc accumulation of externally funded student supports. Unfortunately, few of these strategies have been successful." Rather, Balfanz calls for massing human capital, including full-time national service members, to provide integrated academic and social-emotional evidence-based student supports shown to improve the likelihood that students will graduate prepared for workforce and life success.[32] Balfanz's recommendations are consistent with extensive literature on the role that multiple caring relationships with adults in and out of the classroom plays in supporting student success.[33]

City Year, which receives about one-third of its budget from AmeriCorps, follows this model. Through its Whole School, Whole Child approach, City Year deploys 3,100 AmeriCorps members who are trained to serve full-time in over 330 high-need elementary, middle and high schools, working closely with the school principal and teachers to deliver a suite of interconnected services that cost-effectively and efficiently improve student, classroom, and whole-school outcomes.[34] City Year's approach focuses on:

- Additional capacity in the classroom, supporting classroom management and providing and enabling differentiated instruction

- Use of data to monitor student progress and better meet student needs

- One-on-one and small group instruction in English language arts and math with embedded social-emotional supports

- Extended-day activities: afterschool programming, homework assistance, enrichment curricula and civic projects that build and serve community

- Small group social-emotional skill building sessions

- Whole school activities that improve conditions for learning, engage families, and inspire civic engagement

City Year's results demonstrate that this approach is working, helping to support school-wide gains and strengthening social-emotional student development. A 2015 study of whole-school academic outcomes found that schools partnering with City Year are up to 2 to 3 times more likely to see gains in state assessments in English and math.[35] City Year also helped 68% of students identified as in need of instruction to move on track in social-emotional learning skills,[36] such as self-awareness, self-management, and relationship development, which research shows contribute to college and career readiness.[37]

City Year's long-term plan includes quadrupling its corps members by 2023, in order to:

- *Reach a majority* of off-track students in each of the markets it serves

- In schools served by City Year AmeriCorps members, *double the number of students* who reach the 10th grade on track and on time

- Ensuring that the program is in the *cities that account for two-thirds* of the nation's urban dropouts

- Ultimately, *serve 1 million students per day* in over 1,200 schools nationwide

Turning around one low-performing high school has the potential to yield $14 million in net societal benefits each year.[38]

Similarly, AmeriCorps members service with Playworks is assigned to struggling low-income elementary schools to create a safe and inclusive environment where students can become academically engaged. Corps members deliver six key program components:

- Maintaining a constant presence on the playground during recess, promoting and modeling pro-social skills such as respect, positive language, and problem-solving for students.

- Spending time with individual classes to teach the games offered at recess and introduce the tenets of respect and inclusion, allowing students to become comfortable actively participating in games with their peers.

- FacilitatIng a leadership development program with a group of upper elementary students, providing at least 15 hours of training in the afterschool hours and ongoing support as they become "Junior Coach" leaders who model positive behavior, lead games, and assist with conflict resolution at recess for younger students.

- Facilitating non-competitive, developmental sports leagues each school semester, encouraging participation from students who have not previously felt comfortable playing sports.

- Fostering community engagement by working with their school administration to develop one to two school community events aimed at engaging families within the school community.

Playworks's approach is backed by an experimental study that resulted in several statistically significant findings: (1) Teachers report less bullying and exclusionary behavior than those in control schools; (2) Playworks teachers rated feelings of safety at school 20% higher than teachers in control schools; and (3) Teachers in Playworks schools reported spending significantly less time to transition from recess to learning activities – fewer minutes by 34% – showing an increased readiness to learn.[39]

Teachers in schools with Playworks AmeriCorps members report less bullying and more instructional time by reducing transitional time from recess to learning activities.

C. Personalized Instruction

While students with disabilities have long benefited from individual education plans, states are beginning to adopt policies that enable all students to learn based on their own interests and pace. However, teachers manage an average of 25 students in elementary classrooms and 150 students a day in high school classes, and often find it difficult to provide personalized instruction. Technology can play an important role in individualizing instruction, as can individual and small group tutoring provided or organized by national service participants.[40]

For example, in 2004, Match Education pioneered Match Corps as its flagship program, recruiting elite recent college graduates to provide one-on-one tutoring at its award-winning charter school. Corps members are assigned a personal caseload of 6 to 10 students at the beginning of the year. Match Corps members work during the school day with their students in small-group or individual tutorials over the course of each day, providing close academic support, mainly in math and English Language Arts, and supporting habits that foster the academic success of their tutees. Corps members maintain close contact with students' parents and guardians, building the strong bridge between home and school that is an important part of the Match philosophy. The school environment is small enough that every corps member knows every student by name. This program, now an AmeriCorps affiliate, is an important part of Match Charter Public School, helping it see dramatic increases in persistence, standardized tests in math and reading, SAT results, Advanced Placement, and college success when compared with Boston Public Schools, which have similar demographics.[41]

Match Education sought AmeriCorps education awards to help it recruit elite recent college graduates

as tutors at its award-winning charter school, whose students dramatically outperform Boston Public School students even though its demographics are similar. Other programs have similarly found service year corps members to be effective in supporting individualized learning. For example, Reading Corps, the largest national AmeriCorps tutoring program, provides consistent, daily tutoring to 36,000 students in 12 states and Washington, DC. A study of the program by the National Opinion Research Center at the University of Chicago shows elementary schools and preschool programs that implement Reading Corps get significantly greater outcomes for their students than programs that do not have access to it. The study found that students of color, students eligible for free and reduced-price lunch, and English Language Learners are achieving outcomes equal to or better than their peers. Students with higher risk factors actually made stronger gains, helping to close the achievement gap.[42] In addition, analysis by the Minneapolis Public Schools found that elementary students who received Reading Corps tutoring were nearly three times less likely to be referred for special education services.[43] The savings to the state and schools were estimated at $9 million annually.[44]

AmeriCorps-funded Reading Corps tutors save taxpayers $9 million annually.

Other programs have used AmeriCorps members or VISTAs to recruit and manage traditional volunteers. For example, Reading Partners deploys AmeriCorps members to lead the day-to-day operations of its reading centers, recruit volunteers, and coach volunteer tutors to work one-on-one with students for 45 minutes twice a week, following a structured, research-based curriculum. On average, Reading Partners students more than double their rate of learning while in the program.

Significant additional potential exists in engaging national service corps members to support use of technology to individualize instruction. However, while a smattering of AmeriCorps programs and VISTA placements incorporate classroom technology support, no large-scale effort is currently underway.

D. Extracurricular Enrichment

According to a growing body of research, participating in organized activities outside the classroom helps cultivate the skills, habits, connections, and knowledge that prepare children for lifelong success: academic success in school, graduating from high school, going to college, getting a job, and participating in civic life. One might assume a correlative effect between financial means and participation in extracurricular activities. However, even after controlling for family background and cognitive ability, involvement in extracurricular activities predicts higher grades; higher college aspirations, enrollment, and completion; greater self-discipline, self-esteem, and resilience; less risky behavior such as drug use, delinquency, and sexual activity; and lower truancy rates. The effects of extracurricular activities extend throughout life, correlating to higher wages, career advancement, and higher levels of civic engagement.[45]

Middle-income and affluent parents prepare their children from an early age to excel in competitive afterschool activities.[46] Students in upper-income families spend 300 more hours each year engaging with caring adults and participating in enriching experiences outside of the classroom than do students in lower-income households, resulting in a deficit of nearly 6,000 hours by the time they reach middle school.[47]

School-supported activities often do not sufficiently bridge this experience gap. As Robert Putnam and others note, to tighten their budgets, raise test scores, and focus on academic core competencies, schools with large numbers of low-income students have "no room in the budget for seemingly frivolous extras." While affluent and poor school districts alike have felt pressure to trim their budgets, they have responded in markedly different ways. Poorer school districts often simply cut their extracurricular offerings, while more affluent school districts, and more affluent schools within urban school districts, are able to seek parent contributions to subsidize these programs.[48]

National service programs play an important role equalizing opportunities for low-income students beyond traditional academic classes in a wide variety of ways. For example, participation in sports is widely

understood to improve health, develop leadership and teamwork skills, reduce negative behaviors, and encourage school attendance.[49] Low-income youth are far less likely to benefit from organized sports programs, which increasingly are fee-based. Experts predict that by 2020, one out of four public high schools will no longer have any sport teams or programs of any kind.[50] To help to fill this gap, Up2Us Sports' national service program identifies and trains young adults to coach and mentor youth in low-income communities. These coaches – funded by AmeriCorps – undergo 40 hours of training in youth development and mentoring strategies focused on a trauma-sensitive approach to coaching. This training prepares coaches to promote physical activity, healthy living, and good decision-making, while cultivating caring, trust-based relationships with the youth they serve.[51] An evaluation of the program found that youth paticipants showed an increase in manifesting pro-social behaviors and critical thinking skills and significantly improved physical activity levels in accordance with the number of activities they took part in (i.e. linear correlation between dosage and outcome levels).[52]

> Youth participants working with Up2Us Sports coaches improved their behavior, critical thinking skills, and physical activity.

E. Career Awareness

An understanding of different fields of work is essential for youth to see the connections between what they are learning in school and what they might do upon graduation, which researchers show leads to improved student achievement.[53] In fact, the leading cause cited by high school dropouts was that they did not see a connection between what they were learning in school and opportunities to work.[54]

The development of career goals can also lead youth to make informed choices regarding other key drivers of success, including course selection in high school, summer jobs, and extracurricular and social activities. For example, students who see that a college degree is essential for a desired career are six times more likely to receive a college degree than those who do not.[55]

Children do not develop career awareness through a single experience, but take in information informally from a broad range of sources – the media, friends and family, books and movies, volunteer and work experiences, and other casual connections. However, for low-income youth, the kind of informal learning that results from wide-ranging exposure to opportunities may be extremely limited. While school and community programs could help make up for these limitations, such opportunities are far from the norm. As a result, low- and moderate-income youth may have little understanding of possible careers and even less understanding of what education and experience is necessary to pursue any specific career successfully.

National service offers a resource to build systems that offer low-income students the opportunity to develop career awareness. For example, Citizen Schools partners with public schools in low-income communities to serve students in grades 6-8 with expanded day programs. As a "second shift" in schools, Citizen Schools' full-time AmeriCorps Teaching Fellows:

- Forge deep, consistent relationships with students and celebrate positive values;
- Teach academic skills to disadvantaged middle school students through small-group instruction;
- Recruit and support volunteers to teach hands-on courses and introduce students to diverse careers;
- Increase college readiness and awareness of community resources;
- Engage with students' families; and
- Support program and school priorities with a morning role or partnership.

A defining focus of Citizen Schools is hands-on "apprenticeships." AmeriCorps Teaching Fellows partner with volunteers from local companies, universities, and the community to lead apprenticeships in topics as diverse as robotics, marketing, and nutrition. These experiences enable students to explore careers, develop 21st century skills, and demonstrate their mastery by sharing authentic products and presentations at a culminating public celebration of learning, called a WOW!. Teaching Fellows work with community volunteers to prepare their lessons, co-teach weekly sessions, connect apprenticeships to school-day learning, and design the final project.

A longitudinal study by Policy Studies Associates found that the program engaged students who were at greater educational risk than district students overall prior to enrolling in Citizen Schools, and found substantial evidence of statistically significant positive impacts on students' engagement in school, achievement, and graduation.[56] Other data shows that more than 80% of participants expressed interest in a STEM career and were 30% more likely to earn a postsecondary degree or certificate in a STEM field.[57]

> Students enrolled in Citizen Schools, which uses AmeriCorps members to manage its "apprenticeship" program that exposes youth to careers, are more likely to graduate and three in ten go on to earn a postsecondary degree or certificate in a STEM field. Citizen Schools's systems change initiative, US2020, places VISTA members in each of the city coalitions in its network to coordinate STEM mentorship in districts, afterschool and summer programs. Last year, these VISTAs helped coordinate 3,000 volunteers serving 15,000 students.

While Citizen Schools exposes youth to a broad range of careers, other programs use national service to deliver more targeted experiences. For example, Code Corps delivers Google's Computer Science First programming and other technology experiences to underserved youth. Targeting girls and Hispanic/Latino, Native American, and African American populations, the program builds the capacity of local Boys & Girls Club organizations to implement technology programming, and develop and sustain a skilled volunteer recruitment program and management system. AmeriCorps VISTA members serving with Code Corps establish a skilled volunteer corps – a network of higher education, corporate partners, and community partners who provide reliable and skilled trainers and mentors for the computer science programming efforts.

Similarly, FIRST Robotics, the brainchild of Segway inventor Dean Kamen, engages AmeriCorps members in recruiting teams, mentors, and coaches to help teams of students in afterschool clubs to build robots to compete in an international robot competition. Ten

years of evaluation data demonstrate that participation in FIRST doubles a young person's likelihood of majoring in science or engineering, and encourages almost all participants' interest in doing well in school, taking challenging math or science courses, and going to college, while building their 21st century skills.[58]

H. College Navigation

Applying to college is a complex, expensive, and deadline-driven process that can be daunting to any high school student. While fee waivers can help to reduce costs, many students, particularly those whose parents did not attend college, need help from other adults to make key decisions, write applications, prepare for the SAT or ACT, and meet deadlines. Unfortunately, public school guidance counselors may work with 500 or more students, and have the responsibility of addressing students' pressing personal, psychological, and social problems in addition to advising students on careers and college. Research suggests that typical public school students receive just 38 minutes of personal college counseling over four years, and just four in ten report receiving any college advising.[59] In response, a burgeoning field of private college counselors has emerged. In a decade, the number of private counselors grew from 1500 to 8000. The typical private counseling client is a public school student attending a large suburban school from an affluent or professional family. [60]

National service programs are beginning to fill the gap for low-income students who have neither access to adequate counseling through their school nor the ability to afford private help. For example, College Possible Coaches, serving as AmeriCorps members, guide high school students through all of the key aspects of preparing for college during afterschool sessions for two hours twice a week, at a cost of ⅓ the cost of similar programs. Over the course of their junior and senior years, students complete 320 hours of curriculum in a supportive group of college-bound peers. The junior curriculum orients students to the college application process, provides extensive preparation for the ACT/SAT exam, introduces students to college life through campus tours, and allows time for students to apply for summer enrichment opportunities. The senior curriculum leads students through the college application process, assists

students in applying for financial aid and scholarships, and guides students through the transition to college. As a result, 98% of students assisted are admitted to college; students increase their ACT and SAT scores by 20%; students are twice as likely to attend a four-year institution and twice as likely to graduate from college; and seniors earned $11 million in scholarships. Findings from a randomized, controlled trial confirm that the program has a strong impact on college enrollment for students served.[61]

> Four in ten students receive no college advice throughout high school. To fill the gap, 190 College Possible Coaches, funded by AmeriCorps, provide guidance to 30,000 low-income students annually. As a result, 98% of students assisted are admitted to college, students increase their ACT and SAT scores by 20%, are twice as likely to attend a four-year institution, and twice as likely to graduate.

G. Family Engagement

Experts agree that the engagement of parents and other adult family members in a child's education is an important ingredient for school success.[62] Students with involved parents, regardless of their family income or background, are more likely to earn higher grades and test scores, enroll in higher level classes, attend school and pass their classes, develop better social skills, graduate from high school, attend college, and find productive work. The opposite is true for students whose parents are less engaged.[63]

The link between parent involvement and student achievement is backed by extensive research. Multiple studies have shown that "students with involved parents" get better grades and test scores and are more likely to go to college.[64] However, parent involvement varies greatly, with white students, students with English speaking parents, and students from higher income families experiencing greater parent involvement than black and Hispanic students, students with parents who do not speak English, and low-income students.[65]

Research shows that schools can play an important role determining levels of parent involvement.[66] Working

to include parents is particularly important as students grow older, and in schools with high concentrations of poor and minority students.[67] A synthesis of research on parent involvement over the past decade by the Southwest Educational Development Laboratory found that "[w]hen schools, families, and community groups work together to support learning, children tend to do better in school, stay in school longer, and like school more." Effective strategies include organizing schools so that at least one person knows each child well, keeping a "parent room" in the building, and sponsoring parent-to-parent communication and events. These are key parts of an effective parent-involvement program in the middle grades.[68]

Both City Year and Citizen Schools, which offer a range of student supports, prioritize family engagement. For example, City Year corps members and Citizen Schools Teaching Fellows regularly call families to report on positive progress and organize events to draw parents into the school building. Many school districts use VISTAs or other AmeriCorps members to support parent involvement. For example, a partnership of Messiah College and the Salvation Army with Harrisburg Pennsylvania Public Schools deploys VISTAs to develop programming to resource and equip low-income parents with the knowledge and skills they need to support their student's academic achievement.

At the state level, Indiana's Pre-K Family Engagement Corps, an AmeriCorps program, provides family engagement opportunities in nine On My Way Pre-K sites in Evansville, Fort Wayne, and Indianapolis. Ten full-time members coordinate a range of activities and opportunities that fulfill three primary objectives: to facilitate capacity building of pre-Kindergarten programs to engage, to strengthen program parent-child relationships, and to help 600 parents support their children's development. AmeriCorps members provide regular, on-site resources and activities, including:

- Supporting the development of each program's family engagement strategy;
- Helping programs structure and facilitate family engagement programming;
- Developing a platform to empower families to take an active role in their child's education, with a particular focus on early literacy;

- Implementing Kindergarten transition plans with local schools; and
- Connecting programs to appropriate research-based tools, practices, and assessments.

Sources of Support

Effective programs discussed in this paper, and hundreds of others, are limited in their reach largely due to available resources. This section discusses sources of funding for full-time national service programs and related policy implications.

A. AmeriCorps Grants

State and national grants under the National and Community Service Act, known as AmeriCorps grants, are the largest sources of federal support for full-time domestic national service, and K-12 education is the focus of almost half of existing service year programs funded by AmeriCorps grants. AmeriCorps members serve in one in ten public and charter schools.

Organizations secure AmeriCorps grants in one of two ways: by applying to the State Service Commission in the state in which they operate, or, in the case of multi-state programs, by applying directly to the Corporation for National and Community Service. All AmeriCorps grants are competitive, awarded for three years before the organization must recompete, thus ensuring all programs remain of high quality year after year. In addition, all AmeriCorps grantees must specify and meet performance measures,[69] such as the number of students with improved academic performance in literacy and/or math, number of students graduating from high school on time with a diploma, and number of students entering postsecondary institutions. Most programs must also undergo an independent evaluation every three years, and evidence of impact is a key metric considered in the grant-making process.

 AmeriCorps funds pay but only a part of program costs – often less than half – requiring that organizations secure remaining resources from other sources. In this way, AmeriCorps funding provides foundational support for many programs while leveraging other funding, including private sector donations, to make up the full cost. Surveys of service year programs indicate that the limited number of AmeriCorps slots is their biggest barrier to growth.[70]

B. AmeriCorps VISTA

AmeriCorps VISTA, authorized under the Domestic Volunteer Service Act and also administered by the Corporation for National and Community Service, provides AmeriCorps slots to organizations for projects that build the capacity of programs to alleviate poverty. These slots provide a living allowance for individuals serving, with other program costs typically borne by the host organization. Capacity building activities may include developing a program, recruiting and managing volunteers, raising funds, conducting community outreach, developing and conducting trainings, and other activities that sustainably build programs over a three-year period. Like AmeriCorps grants, AmeriCorps VISTA hosts must specify and track progress against specific performance measures. In 2016, AmeriCorps VISTA volunteers were approved to provide capacity building assistance to more than 2,900 education-related project sites.[71]

C. National Service Trust Fund and Affiliate Program

The National Service Trust Fund, also administered by the Corporation for National and Community Service, holds Segal Education Awards for AmeriCorps members. Segal Education Awards are made available to individuals who serve in AmeriCorps grant, VISTA, and National Civilian Community Corps, as well as Affiliate programs that do not receive grant or program funds from CNCS. Segal Education Awards for 1700 hours of service equal the amount of a maximum Pell Grant and can be used to pay for higher education or to pay back student loans. When a member claims the award, the Trust pays it directly to a qualifying institution of higher education or student loan lender. (Note that, although Segal Education Awards are taxable when they are used, funds cannot be converted to cash, requiring the AmeriCorps member to pay income taxes on the amount of the award.)

D. Federal Department of Education School Turnaround Corps

The School Turnaround AmeriCorps grant program, launched in 2013, was a joint initiative of the Corporation for National and Community Service and the U.S. Department of Education. The School Turnaround AmeriCorps program was intended to increase the capacity of the nation's lowest-achieving schools to implement their turnaround models successfully, primarily through efforts to improve students' academic performance, academic engagement, attendance, high school graduation rates, and college readiness. About 50% of high school dropouts were found in approximately 15% of high schools, enabling a targeted response to getting the right supports to the right students in the right schools at the scale and intensity required.[72]

School Turnaround AmeriCorps was very similar to other AmeriCorps programs, with three key differences. First, to host School Turnaround AmeriCorps, schools must have been designated as School Improvement Grant (SIG) or Priority status schools, or be among the 5% of a state's persistently lowest-achieving Title I schools. Second, School Turnaround AmeriCorps programs must establish partnership agreements with the schools that detail specific grant requirements. Third, the services to be provided by School Turnaround AmeriCorps members should align with the goals and student needs identified in the schools' turnaround plans.

Evaluation of the program found that it successfully improved academic achievement and influenced applicable school turnaround goals, including establishing a school culture and environment that fosters school safety, attendance, and discipline.

E. Federal Innovation Funding

National service programs have received signifiant funding from federal innovation programs, including Investing in Innovation (i3) grants and the Social Innovation Fund (SIF). These competitive funding streams require grantees to have strong evidence of their impact and tier support based on the level of evidence, with the programs that have the highest levels of evidence

receiving the largest grants. These grants are not limited to national service programs, which must compete with other types of organizations. Depending on the specific federal fund, the grants may be used to expand and develop innovative practices that can serve as models of effective practice, identify and document best practices that can be shared and taken to scale, fund evaluations, and foster public-private partnerships.

F. Public Education Funding and Charter School Support

Most national service programs operating in schools, including those funded by AmeriCorps, receive a portion of their budget from school sources. In the case of teacher corps, corps member salaries are typically paid by schools, while the costs of training and supporting corps members are supported through other means. In contrast, programs that place corps members in schools to play other roles may rely on support from schools, often a set fee on a per-corps-member or per-team basis. These fees may come from general support or, in some cases, a restricted federal grant such as Title I, Title IIA, School Improvement Grants, or 21st Century Community Learning Centers grants. In some cases, such as Match Tutors, charter school funds are used to pay the costs of the program, including living allowances, with AmeriCorps support limited to education awards.

G. State Funding

In some cases, state appropriations support specific programs. For example, Minnesota appropriates more than $10 million annually for Reading Corps and Math Corps. Other states replicating these programs, including Iowa, Washington, and Colorado, have also used state funding to supplement AmeriCorps funding.

H. Corporate and Philanthropic Support

Virtually all programs receive a substantial portion of their funding from philanthropic or corporate sources, and have done so from the earliest days of national service implementation. According to the Corporation for National and Community Service, today private sector funding for AmeriCorps exceeds the federal contribution. The amount of private sector funds varies program to program.

Private sector funding for AmeriCorps exceeds the federal contribution.

Conclusion

Human capital is key to successful education, particularly for economically disadvantaged students. Quality classroom teachers and school leaders matter, as do the availability of academic and extracurricular supports, parent engagement, and the ability to learn about and access college and career opportunities.[73] National service, particularly AmeriCorps, is playing a critical but largely unrecognized role in providing an alternative pipeline of teachers, preparing education reformers, and helping to improve outcomes at schools serving a large number of low-income students, by improving school climate, supporting individualized learning, providing extracurricular programming and college navigation, and increasing parent involvement. In most cases, these programs receive a mix of public and private support, with AmeriCorps leveraging other resources. Additional public investment in national service, particularly AmeriCorps, would help to scale these programs for even greater impact, by unlocking additional sources of funding, including state, local, and private dollars.

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