

REIMAGINING PATHWAYS TO STUDENT SUCCESS: PENCIL'S OBSERVATIONS & RECOMMENDATIONS FROM A THREE-YEAR RETROSPECTIVE

**BRIEF #1: INCREASING ACCESS TO OPPORTUNITY THROUGH NEW YOUTH
EMPLOYMENT MODELS**

**BRIEF #2: FOSTERING A FOUNDATION OF GROWTH MINDSET THROUGH
SCHOOL-BASED PROGRAMS**

**BRIEF #3: BUILDING RELATIONSHIPS THROUGH DEVELOPMENTALLY
ALIGNED PROGRAM MODALITIES**

*By Jessica Bynoe, Devaughn D. Fowlkes,
Keith A. Howey & Katje Lilah King*



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Over the past two years, youth serving non-profit organizations in the education and workforce development fields have needed to rapidly innovate, create, and adapt in the unstable and uncertain environment of the pandemic. Like our peer organizations, PENCIL shifted to virtual service delivery, developed new models, and refined programs to offer young people what they needed most during this unique and historic moment.

PENCIL also embraced this time to learn from our work and understand the specific program elements that drive desired outcomes in our efforts to “connect students to success.” With support from the Carnegie Corporation of New York, PENCIL conducted a three-year retrospective evaluation to understand what is working, what could be better, and what we can share to strengthen the field’s efforts overall. The result of that work is captured in a series of three briefs, each exploring a unique, data-driven hypothesis for one of the pillars of PENCIL’s Theory of Change. PENCIL’s Theory of Change asserts that to be “connected to success” a young person needs Developmental Relationships, Skill Attainment, and Access to Opportunity. Specifically, the briefs will explore the following topics:

- The difference between Career Explorers and all other PENCIL programs in its ability to increase students’ access to opportunity and sense of belonging. Notable trends were observed for high school students and first-generation college bound students.
- The difference between virtual and in person service delivery on building mentorship relationships for students especially for different age groups.
- The difference between school-year and summer program models on our measures of skill attainment and the potential for more developmentally scaffolded year-round approaches.

Students participating in PENCIL programs are asked to complete pre and post surveys. These surveys include 18 questions across three indices designed to measure PENCIL’s three “Keys to Success.” Factor analysis conducted on all asset questions and individual indices found indices to be internally consistent and unique (TLI =0.95, RMSEA =0.047). MANOVA was conducted on Z-scores created from individual indices. Post hoc analysis was conducted on programmatic and demographic variables showing statistically significant (CI > 95%) intergroup differences as well as the interaction effects between two demographic variables. Dependent variables included year, program, virtual/in-person, grade, self-reported race/ethnicity, gender, age, English spoken at home, and parental education. Post hoc tests were not conducted due to data limitations. Preliminary post hoc analysis focused on population subgroups show trends based on available data and do not meet the sample size requirements for statistical significance. Data was collected and reviewed across four program offerings:

The PENCIL School Partnership Program (In Person)

PENCIL creates and supports ongoing relationships between business partners, schools, and students to prepare students for college and career success. PENCIL staff coordinate and guide monthly sessions that are supported by business partner volunteer teams. Programming increases student access to relationships, skills, and opportunities unique to the business sector. Sessions range from workshops on networking and professional communication, to panels with corporate volunteers introducing students to career options within a company. In person program data was collected during the 2018-19 school year (n=277).

The PENCIL School Partnership Program (Virtual)

Virtual School Partnership Programs offered the same content and structure as the above but adapted for online delivery. Virtual program data was collected during the 2019-20 and 2020-21 school years (n=217).

PENCIL Internship Program

Each year, PENCIL places hundreds of students (ages 16-22) in paid six-week summer internships at companies across New York City. Students are required to attend 20 hours of pre-employment training facilitated by PENCIL staff and corporate volunteers to learn essential career-readiness skills including financial literacy, office technology, networking, and personal branding, interview best practices, and workplace etiquette. PENCIL matches students to interviews for available summer positions businesses recruited from a variety of industries. Final hiring decisions are made by employer partners. Internship data was collected from students in virtual and in-person internships during the summers of 2020 and 2021 (n=68).

PENCIL Career Explorers

In response to the impact of COVID-19 on the availability of internships, PENCIL designed and launched Career Explorers. The program offers high school students a paid work-based learning experience designed to promote career awareness, exploration, and preparation. All program components have been delivered virtually. Career Explorers attend the internship program's pre-employment training facilitated by PENCIL staff and corporate volunteers and then engage in 150 hours of paid work-based learning during the summer. They complete an industry-specific project related to their career interest and are paired with a volunteer mentor from that industry who provides guidance and feedback as well as networking and career exposure. PENCIL staff provide daily supervision to ensure participants remain focused and meet all deadlines and deliverables. Career Explorer data was collected from students during the summers of 2020 and 2021 (n=67).

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In the distribution of this series, PENCIL hopes to contribute to and advance the conversations around what it will truly take to harness this moment in time and prepare young people for successful pathways in their academic and career pursuits. New York City is hungry for an economic renaissance as the effects of the pandemic stabilize. Part of that equation must be an understanding that when we connect students to success, we connect the city to success. It is in our collective best interest to learn from the past two years and reemerge with, not the same old programs and opportunities for young people, but better ones that sustain and scale the successful innovations born of this moment.

To discuss opportunities for partnership, please contact [Jessica Bynoe](#), PENCIL's VP & Chief Strategy Officer. For information on PENCIL's evaluation methodology and research, please contact [Keith A. Howey](#), PENCIL's Director of Impact & Operations. For details on our program implementation, please contact [Devaughn D. Fowlkes](#), PENCIL's Associate Director of Programs or [Katje Lilah King](#), PENCIL's Senior Program Officer.

BRIEF #1: INCREASING ACCESS TO OPPORTUNITY THROUGH NEW YOUTH EMPLOYMENT MODELS

Though opportunities exist for NYC’s young people to explore careers and the multitude of pathways possible for success, many students do not have sufficient access to them.^{i,ii} Inequitable access to work-based learning opportunities limits the mobility of young adults and prevents many from participating in the economic growth of their community.ⁱⁱⁱ Access to opportunities that engage students in enriching experiences and cultivate social capital^{iv} is vital if we are going to reimagine the experience for all NYC students to include meaningful career pathways. Research has shown cultural and social capital increase students’ cultural awareness and sense of belonging^v and PENCIL believes these are foundational building blocks to career pursuit and persistence.

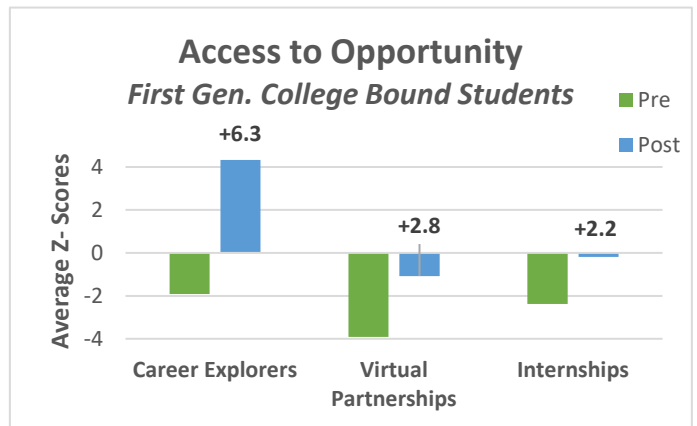
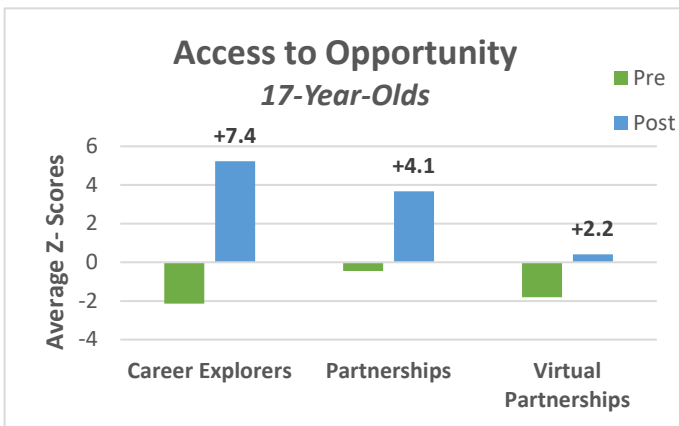
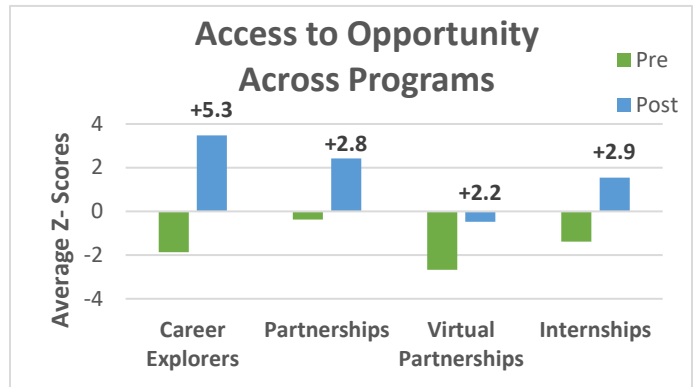
For over 25 years, PENCIL has connected students to opportunities that advance college and career readiness as well as expose them to a variety of successful post-secondary pathways. PENCIL helps students access people, knowledge and experiences within the business environment that were previously inaccessible by working with partners to understand and overcome the social norms, practices, and expectations that exclude students from enriching spaces, places, and events.

Internships are often successful points of entry that increase access to opportunity, enhance career exposure, and build a sense of belonging. Nevertheless, such opportunities are not equally distributed. High school students are consistently overlooked by employers who control hiring into traditional internship positions. Of the 2,177 high school students that applied for internships with PENCIL in 2021, only 90 were selected by employer partners in the hiring process. Employers often cite lack of industry experience as the rationale for selecting other candidates.

Given the long-term impact connected to access to opportunity it is imperative the education and workforce development fields find opportunities to scale models, other than, and alongside traditional internships, that support strong outcomes in this domain.

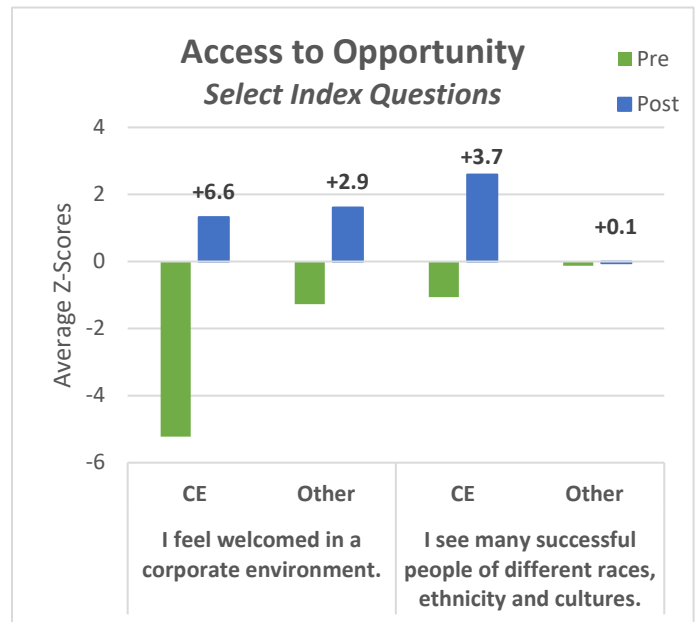
Findings

In a three-year retrospective analysis of PENCIL’s program models, one program emerged with consistently greater gains related to access to opportunity. Career Explorers outperformed PENCIL Partnership Program students (both those in person and virtually) as well as “traditional” internships across all three years of the study. Additionally, Career Explorers points to greater gains in this outcomes area for nearly every demographic group evaluated, particularly 17-year-old high school students and first-generation college bound students.



The results for 17-year-olds and first-generation college bound students currently point to trends in the data, not yet clear statistically significant differences. Nevertheless, given the program realities PENCIL has observed, we believe these trends merit further exploration. Additionally of note, 17-year-olds in internships are not included in the data due to the extremely low sample size.

What we can statistically observe related to this index is that some drivers of this enhanced impact seem to be related to the extent to which participants felt welcome in a corporate environment as well as the visibility of ethnic, racial and gender diversity among successful people students meet through the Career Explorers program. This data couples with the program implementation reality to create a compelling case for expansions of such models.



Program Reality

Given the statistical success and promising trends for Career Explorers, it is important to understand what elements of the program may be contributing to this success so they may be replicated across not only PENCIL's portfolio, but the broader field as well. The multifaceted structure of Career Explorers allows students to gain deep insight into an industry, make many professional connections, and get genuine support and encouragement from someone with expertise in their industry of focus:

Meaningful Industry Exposure - The youngest Career Explorer students are typically 17 and, having just completed their Sophomore or Junior year of high school, likely to not have had previous access to internships. For most, Career Explorers is their first opportunity to enter a professional environment and have access to the associated tools, skills, and responsibilities. In lieu of tasks associated with a traditional internship, Career Explorers are asked to complete a capstone project designed collaboratively with their mentor, leveraging both their interests and the mentor's experience. While traditional internships may offer a limited introduction to the field and tasks are often administrative in nature, Career Explorers delve deep and do meaningful work that mirrors what might be asked of them as professionals in a given field. For example, Career Explorers have developed their own investment portfolios, conducted community assessments, and structured real estate development pitches. Mentors provide a high level of guidance throughout, introducing new concepts and providing students with support as they learn new skills. This supported, rigorous environment may be creating conditions to build students' confidence in an industry and contribute to positive feelings about their chances to succeed in a corporate environment.

Social Capital - As opposed to partnership and internship programming, where students work exclusively with individuals from a single company, Career Explorers work in industry-aligned cohorts that connect students to diverse professionals from a range of companies in their industry of choice. In weekly facilitated sessions, students learn about a range of businesses and roles within a single career field. Further, cohorts are small, and students have multiple touchpoints with all the mentors in a cohort, encouraging them to form meaningful connections with multiple adults and not just their individual mentor. One of the indicators that support enhanced access to opportunity is when a student sees and engages with leaders of many races, ethnicities, and genders in the setting they are in. Career Explorers' structure may help students see and experience a wider range of connections as compared to other program models.

Access & Encouragement from Mentors - The weekly check-ins Career Explorers have with mentors provide an opportunity for students to get encouragement and constructive feedback on their capstone projects. These conversations help students fully appreciate how their strengths and interests are an asset in the field they are hoping to pursue. The trust-based relationship between mentor and mentee offers students the opportunity to explore the industry without judgement. In these conversations, students can consider if the work truly aligns with their interests, discuss their place within a larger field, and develop a sense of connection and familiarity with a particular business or industry. When students are encouraged to see and pursue the possibilities for their futures, they are more likely to demonstrate an increase in the access to opportunity index. The relationship with their mentor and ongoing conversations about their future create a sense of connection and belonging that is often stronger among the Career Explorers as compared to students in the partnership and internship programs.

Recommendations

While created in crisis, Career Explorers offers a strategy, beyond the pandemic, to prepare NYC high school students more equitably with the skills and experiences they need to break into cutting-edge careers. The results of PENCIL's evaluation demonstrate the potential of this model to enhance young people's access to opportunities and their sense of belonging within the spaces and places those opportunities play out. The latter point being supremely important to ensure young people experiencing barriers to such experiences are included and embraced. As NYC redefines itself after the most critical impacts of the pandemic seem to have stabilized, it is clear career pathways for youth will play a major role in the city's immediate and long-term success. Most importantly, for all students to have equitable access to the careers they dream of, it is imperative for the city and the city's youth employment providers to develop creative solutions, not only through expanded supply of jobs, but also with supports and program elements that precipitate long-term success for all. To that end, following are several recommendations for the field as well as PENCIL's own program enhancement.

Understand Career Explorers as a viable model to complete the Summer Youth Employment landscape, especially for high school students. From PENCIL's experiences, it is clear younger students seeking summer employment greatly benefit from a paid work-based learning experience that offers them unique entrée, mentorship, and technical knowledge in a highly supportive, low risk environment. Considering Career Explorers, and similar simulated internship models, as a first step in paid career-facing summer employment can help build high school students' confidence about, awareness of, and comfort in an industry they may pursue. Such models will better prepare students for future employment and instill attitudes of persistence as they enter challenging occupational fields. Especially as summer employment in NYC is poised for unprecedented growth, these models also have the ability to exponentially increase the pool of available jobs. Furthermore, as an offering exclusively for rising high school juniors and seniors, this type of model can be the start of a clearer arc of career pathways to best prepare youth for success.

Enhance all Summer Youth Employment programs with industry mentors that represent a variety of fields and companies. The quality of an individual young person's summer employment experience often depends on the adults they engage with as mentors, supervisors, role model, etc. Depending on the job, the people surrounding a student or intern may or may not represent the parts of an industry a young person is most interested in and, as a result, an opportunity to truly ignite a spark might be missed. What if we could saturate youth employment experiences with more mentors, role models, and experts representing a near 360-degree view of a given field? Through shared infrastructure of employer/corporate partner engagement, it may be possible to offer young people in any NYC summer employment program access and facilitated connections to thousands of diverse professionals who mentor and model infinite paths to success. Access to such a pool of people can increase the chances for young people to see themselves represented in a field they are interested in and therefore increase the likelihood they will pursue that field.

Encourage all summer employment work to be as embedded as possible in technical aspects of a field. As indicated above, the kinds of projects Career Explorers work on often traverse the “typical” scope of work an intern might be responsible for during summer employment. In such experiences, with the help of their industry mentor, young people can gain insight into elements of an industry that are more holistically representative of the kind of work they might do if they pursue that field. Furthermore, in simulated experiences, young people are free to experiment, make mistakes, and get creative, which can add to their comfort with the work. While many internships and summer employment opportunities might be limited in their ability to fully offer this level of access into technical work, it is possible to add more substantial capstone or reflection assignments to a summer employment experience where interns aggregate their observations and learnings from the summer and present them as part of a set of tangible recommendations that a company or department might pursue. This added element can foster a deeper appreciation for the industry and offer an opportunity to assert early agency as a developing leader in that industry.

Increase touchpoints between students and mentors in school-based work-based learning programs. One of PENCIL’s observations related to Career Explorers is the impact regular career encouragement from mentors has on students’ comfort and confidence. Bolstering this element in PENCIL’s other school-based programs could increase the extent to which students feel they are encouraged and supported to pursue their passions. Many times, school-based career readiness models focus on skill building and information sharing to increase exposure to an industry. Installing a more frequent feedback loop between mentors and students where students process their aspirations alongside the skills and information obtained through program sessions could lead to outsized impact in the domain of access to opportunity.

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As NYC approaches the summer of 2022, PENCIL will continue to evaluate the hypotheses and recommendations in this brief. With the Summer Youth Employment Program set for unprecedented growth, PENCIL looks forward to working with and learning from the many partners in the city working to enhance access to opportunity for all youth. We encourage the sharing of data, observations, and models to achieve that end and are happy to widely collaborate.

ⁱ Showalter, Thomas and Katie Spiker (2016). Promising practices in work-based learning for youth. National Skills Coalition.

ⁱⁱ Kenny, Mareen et al (2016). Preparation for Meaningful Work and Life: Urban High School Youth’s Reflections on Working-Based Learning 1 Year Post-Graduation. *Frontiers in Psychology*. 7(286).

ⁱⁱⁱ Cahill, Charlotte (2016). Making Worked-Based Learning Work. *Jobs for The Future*.

^{iv} Bourdieu, Pierre (1986). *Distinction: A Social Critique of the Judgement of Taste*. New York, NY: Routledge.

^v Coleman, James (1990). *Foundations of Social Theory*. Cambridge, MA: Harvard University Press.

BRIEF #2: FOSTERING A FOUNDATION OF GROWTH MINDSET THROUGH SCHOOL-BASED PROGRAMS

As the effects of the pandemic on the global labor market become clearer and sustained, more and more employers are experiencing a talent shortage. Over 69% of employers recently report difficulty filling vacancies.ⁱ Additionally, employers are prioritizing soft skills such as teamwork and flexibility in their hiring.ⁱⁱ While soft skills are important, the role that technology played during the pandemic means employers are still looking for strong technical expertise in areas such as operations, IT, and infrastructure. Whether someone has essential or technical skills, the groundwork must be laid for young people to believe in their potential to gain and develop those skills.

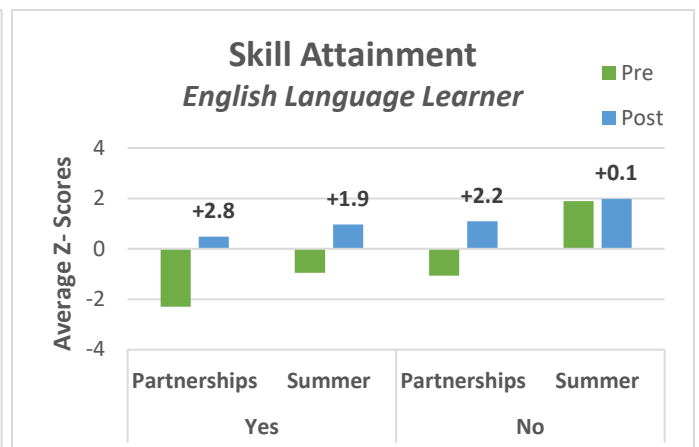
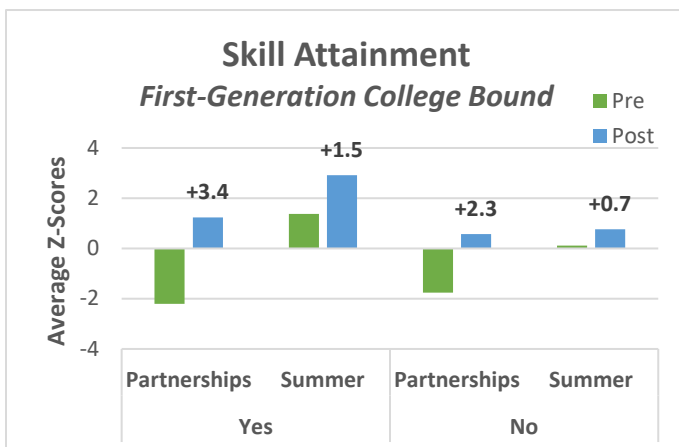
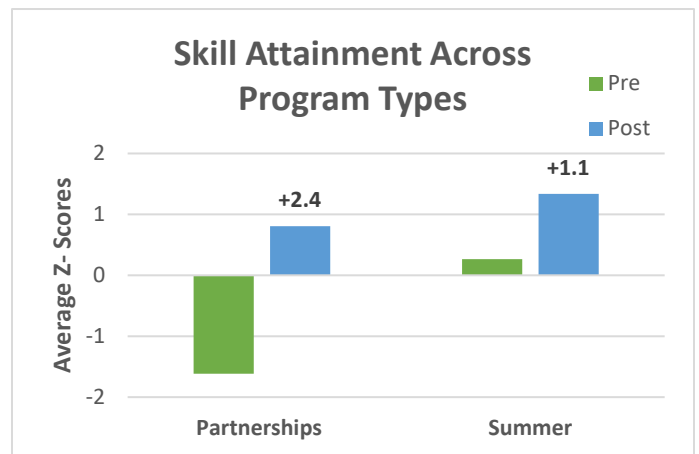
To attain skills, students must first understand their ability to increase intelligence through effort. Carol Dweck coined the term “growth mindset” as this understanding of personal growth through perseverance.ⁱⁱⁱ Individuals with a growth mindset are more likely to put extra time and effort into projects and achieve more success. Research suggests developing a purpose and personal brand are powerful tools to improve growth mindset.^{iv}

PENCIL works to help students develop a growth mindset by establishing realistic goals for personal development that are supported by staff and volunteers through a strengths-based approach. Volunteers from corporate partners use their expertise and personal experiences to model growth and resilience. Attaining new skills in an environment focused on effort instead of solely achievement helps students acquire essential skills and new learning strategies. This helps students understand that abilities and intelligence are fluid and can be improved.^v Students with this growth mindset have been shown to put extra time and effort into activities that lead to college and career achievement.^{vi}

Growth mindset can vastly improve students desire to explore, pursue, and enhance all other in-demand skills to support future success. Therefore, it is important to understand what programs and pedagogy can create the conditions for this outcome.

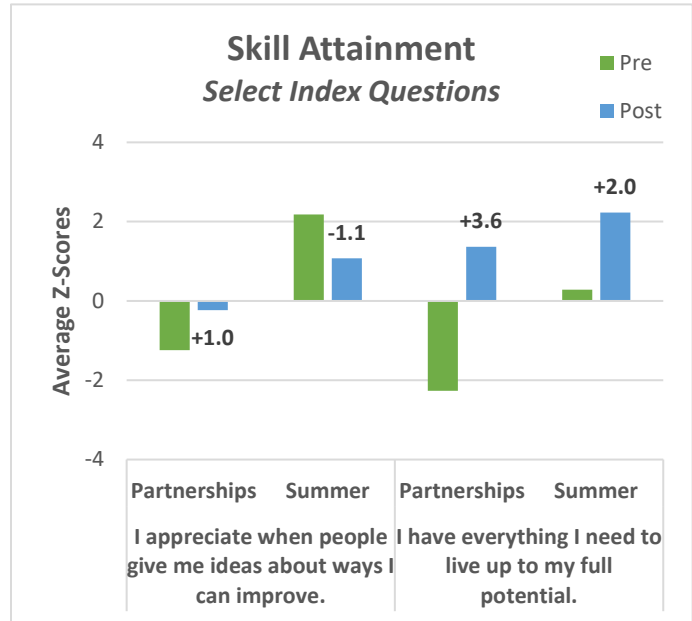
Findings

In 2019 and 2021, students in PENCIL’s School Partnership Programs reported greater gains in PENCIL’s skill attainment index as compared to their summer peers. The skill attainment index works to measure students’ growth mindset – the understanding that knowledge can be developed through sustained efforts and perseverance. While students in both summer and school-year programs participated in skill development sessions, participants in School Partnership Programs developed more understanding that they can overcome challenges and increase abilities through effort.



The results for first-generation college bound students and English Language Learners currently point to trends in the data, not yet clear statistically significant differences. Nevertheless, given the importance in building strong foundations for success for these populations, we believe these trends merit further exploration. Additionally of note, data on first-generation college bound status was only collected for School Partnership students starting in 2020.

What we can statistically observe related to this index is that some drivers of this enhanced impact seem to be related to the extent to which participants felt they have everything they need to live up to their potential and the extent to which they are receiving meaningful feedback. This data couples with the program implementation reality as related to strengths-based approaches and volunteer support.



Program Reality

Given the statistical success and promising trends in PENCIL’s School Partnership Programs, it is important to understand what elements of the program may be contributing to enhanced growth mindset and ultimately skill attainment. This exploration will inform how program characteristics may be replicated across not only PENCIL’s portfolio, but the broader field as well. The structure and content of the School Partnership Program helps students focus conversations on effort, accomplishment, interests, and achievements and reframes them in a forward-thinking career-focused context. Conversations between students and volunteers center around facing and overcoming challenges which help strengthen students’ growth mindset and sense of agency.

Strengths-Based Focus - PENCIL Partnership sessions employ a strengths-based focus taking students through a discovery and self-awareness journey to identify what is possible for their futures by acknowledging skills and talents which are innately present. Through a series of workshops with PENCIL staff and volunteers, students learn about essential career readiness skills, such as resume development, interviewing, or networking, through the lens of their personal strengths and interests. In these sessions volunteers validate student interests, promote further career exploration, and help students identify assets and accomplishments they might normally overlook. By approaching these topics from a strengths-based perspective, students internalize their ability to reach their full potential while employing their own power to define a vision of what that potential means. This asset-based agency is critical to embracing growth mindset leading to confidence and willingness to try, even if success is not guaranteed. The strengths-based foundation of PENCIL’s School Partnership Program offers students a consistent, safe environment to learn about themselves, take risks, and receive ongoing encouragement and support.

Volunteer Mentors as Critical Friend - Partnership volunteers commit to a full year of programming, enabling them to build authentic and meaningful connections with students. While mentorship can take many forms in youth programs, PENCIL School Partnership Programs position mentors to act as a critical friend offering feedback and guidance especially as it relates to academic and career pursuits. Partnership sessions typically include small group activities where volunteers not only provide students with important feedback as they build their college and career skills, but share their own career journey, including their mistakes and unexpected changes. Through these interactions, students are able to see the importance of feedback and growth, not just for their current work, but as part of their ongoing process to achieve their goals. Volunteers also model and reinforce the importance of essential skills for students to build to achieve education and career success. The opportunity for volunteers to share their own stories of both triumph and challenge offer a “living proof” case of how anyone can

develop both technical and essential skills as well as how they are applied. In creating this human connection, volunteers gain trust and credibility with students which creates space to grapple with big questions related to long term goals and aspirations.

Program Accessibility –School Partnership Programs have had meaningful impacts on students who are first-generation college bound as well as those for whom English is not their first language. For these students, PENCIL sessions and volunteers may provide access to mentors and knowledge about post-secondary pathways that are not available through students’ family or community networks. The fact that programming and connection to diverse mentors is available at school, during the school day, makes it easy for students to participate as they do not need to navigate finding programming on their own. Additionally, PENCIL encourages volunteers to share their own stories as public school alumni, first-generation college students, first- or second-generation immigrants, etc. In connecting with students and sharing their lived experiences, volunteers provide students with knowledge and reference points that can help them more confidently navigate their own post-secondary journey. Access to mentors who can model diverse pathways to success is critical for students to develop their own growth mindset by seeing many examples of personal growth and development. Many workforce development programs that exist during the summer or afterschool hours that might offer similar connections often have considerable barriers to entry requiring students to provide a significant amount of personal and family documentation at enrollment, including proof of citizenship. Accessing this documentation is burdensome for many families and exclusionary to undocumented students. By providing programming in the school context, PENCIL is able to avoid these obstacles and deliver programming that is foundational to future success for all students.

Recommendations

PENCIL has been managing School Partnership Programs for well over a decade. These programs have always been seen as an asset to schools that often need additional capacity managing external partnerships with the business community that support workforce development for their students. What has become increasingly clear about the unique role such programs play is that they are critical to build a strong foundation for students as they explore pathways to success that fulfill *personal passions* and lead to long-term *economic stability*. Students need safe spaces and encouragement to articulate their aspirations and connect their assets and talents to long-term achievable goals. The results of PENCIL’s evaluation demonstrate that school-based models can enhance growth mindset which will ultimately lead to more curiosity, comfort in risk-taking, and belief in one’s ability to define and reach their potential. During a moment when many students have had to face so much uncertainty just to imagine tomorrow, it is imperative we provide them with tools and supports to believe in and shape thousands of tomorrows. Instilling growth mindset through strengths-based programs, mentors as critical friends, and accessible opportunity are imperative to driving equitable access to success. To that end, following are several recommendations for the field as well as PENCIL’s own program enhancement.

Scaffold school-based models designed to enhance growth mindset with summer employment programs that support technical skill practice and development. In this evaluative comparison of programs, PENCIL was eager to understand which of its models were leading most effectively to the outcomes that support student success. In doing so, it is clear that a school-based model that supports self-discovery through skill building, mentorship, and a strengths-based approach both enhances growth mindset as well as the development of essential skills. Different from the summer employment programs it was compared to, School Partnership Programs offer students more consistency and structure with volunteer mentors where conversations about setbacks are encouraged as much as conversations about success. The value of such a foundation cannot be overlooked and it is worth exploring how students in such programs would do if their participation directly preceded a summer employment experience. When considered alongside the outcomes presented in the first brief in this series, with a strong growth mindset and ability to attain new skills, young people would be able to leverage opportunities to enhance technical skills during summer employment even more. New York City should explore the potential to scale such models in middle school and the first years of high school to ensure every student experiences such programs before they become eligible for summer employment.

Celebrate effort and growth as much as finite achievements, especially in work-based learning and summer employment settings. Research demonstrates that when students develop a growth mindset and understand that their learning and development is ever evolving, they are more likely to put in extra effort in their academic and career pursuits. Much of the PENCIL Partnership Program is about discovery, not a final accomplishment, which allows for more creativity from the student and ongoing encouragement from staff and volunteers. While this design may not be practical in all settings, we can consider ways to support students' discovery and effort more in experiences like summer employment, where success often does require product and performance. In many summer employment models there can also be abrupt handoffs between school, program provider, and employer leaving students with an inconsistent set of supports to help them reflect on their effort and growth. Whereas, in a School Partnership Program, the educator, volunteer, and PENCIL staff are all in the sessions together supporting students through a shared awareness. As a field we should explore more collaborative and consistent tools, communication structures, and systems for young people in career readiness programs to have a community of people recognizing their growth and effort. A holistic and coherent support system could bolster students' confidence and make them more receptive to feedback for projects that do require objective measures of success. We may also consider ways to give students more structured opportunities to reflect on their own growth and share that reflection with all the trusted mentors, educators, and program staff who regularly work with them.

Increase accessibility and cultural responsiveness of work-based learning programs to resonate with English Language Learners and first-generation college bound students. Ensuring equitable access to success for all students means we must make those programs and models that build foundational competencies, such as growth mindset, available to all students. While PENCIL's School Partnership Program gives us some inclination as to how we might do that, it is still a singular program model that only serves a few thousand students a year. It is imperative to find ways to entrench elements of this model such as self-discovery, career-based mentorship from corporate volunteers, and strengths-based frameworks into required curriculum for every 9th or 10th grade student in the city. Embedding it in the school experience eliminates barriers some students face such as program applications, navigating a complex ecosystem of programs on their own, or limited social capital. Scaling a program to reach 150,000 to 300,000 students a year will require capacity building inside schools, an honest assessment on how to effectively run programs with staff trained in youth development, and better coordination with corporate partners to engage diverse volunteer mentors who can share personal stories that resonate with students. Universally offering programs in schools that help develop growth mindset will also help all students approach and leverage summer employment programs more intentionally to support their long-term aspirations and sustained economic success.

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During the summer of 2022 PENCIL will evaluate the outcomes for students who were enrolled both in our School Partnership Programs as well as our Career Explorers program. This layer of evaluation will further explore the opportunity to implement some of the recommendations above. Additionally, as NYC considers new models during the 2022-23 academic year, PENCIL looks forward to working with and learning from the many partners in the city to understand the opportunities to build and encourage a growth mindset with the city's youth. We encourage the sharing of data, observations, and models to achieve that end and are happy to widely collaborate.

ⁱ ManpowerGroup (2021). Employment Outlook Survey Q3.

ⁱⁱ Rockwood, Kate (2021). The Hard Facts About Soft Skills. HR Magazine.

ⁱⁱⁱ Dweck, Carol (2007). Mindset: the new psychology of success. New York: Ballentine Books.

^{iv} Briggs, Saga (2016, June 24). How a bigger purpose can motivate us to learn. Open Colleges.

^v Dweck, Carol (2007). Mindset: the new psychology of success. New York: Ballentine Books.

^{vi} Network For Teaching Entrepreneurship (2018). Measuring Entrepreneurial Mindset in Youth.

BRIEF #3: BUILDING RELATIONSHIPS THROUGH DEVELOPMENTALLY ALIGNED PROGRAM MODALITIES

Relationships have the power to create the opportunities young adults in New York City need to succeed. As defined by the Search Institute, developmental relationships are close connections that help young people discover who they are, cultivate abilities to shape their own lives, and learn how to engage with and contribute to the world around them. Research demonstrates time and again that relationship development and social capital are key indicators for future success. Furthermore, relationships across difference, particular economic difference have the power to support economic mobility for groups that often face barriers to opportunityⁱ

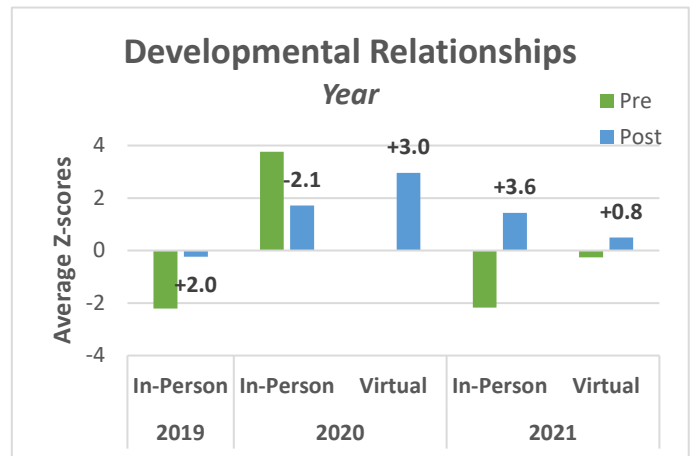
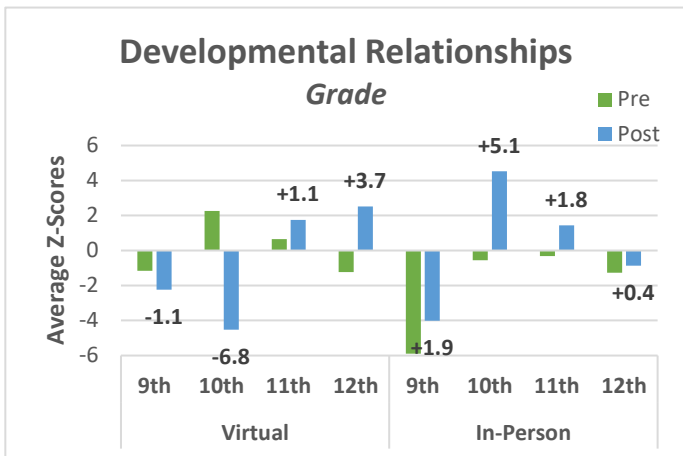
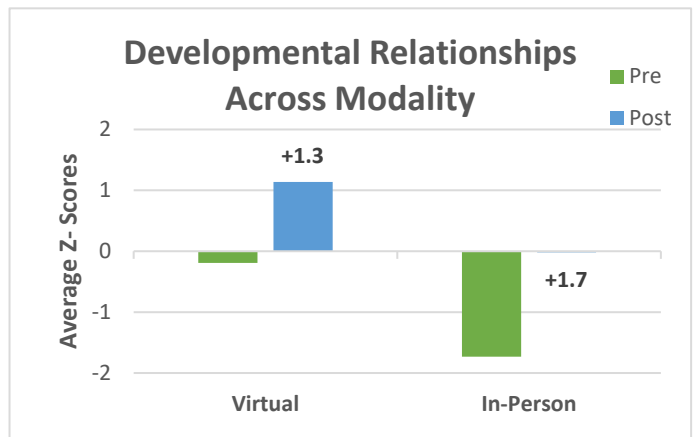
With the onset of the pandemic, PENCIL needed to switch to virtual programming. At a time when there was limited opportunity to build new connections, PENCIL needed to adjust how it connected students to volunteers. This required adapting how programs were delivered, changing the presentation of material, and exploring new formats for volunteer and student interaction. Over the past 28 months, PENCIL has delivered over 950 virtual program sessions, providing critical data on how students have connected with, and learned from, PENCIL volunteers during that time as compared to pre-pandemic, in-person work.

Through both virtual and in-person program modalities PENCIL works to help students develop meaningful relationships with volunteers through facilitated processes. Students and volunteers engage in activities to get to know each other as people. Volunteers are encouraged to share stories about challenges as much as successes. Students are challenged by volunteers in positive ways to aspire to stretch goals. These connections help students internalize that there are adults outside their families or social circles that care about and support their success.

Young people with three or more caring adults in their life are more likely to achieve their goals.ⁱⁱ How young people build and trust those relationship vary, especially across age and environment. Therefore, it is important to understand what programs modalities work best for different age groups as the build meaningful connections.

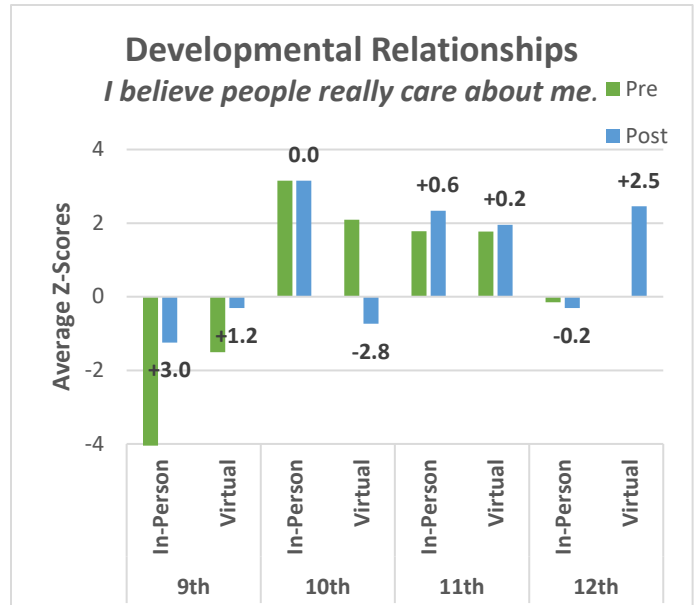
Findings

From 2019 through 2021, students in PENCIL’s in-person programs reported greater gains in PENCIL’s Developmental Relationship index compared to students in virtual programs. The developmental relationship index measures students’ connection to and trust of adults. Upon further inspection of the data however, it appears the students in virtual programs in 2020 as well as 12th graders across all years experienced stronger gains than even the aggregate for all in-person students.



The results for program modality across years have low n numbers for in-person work in 2020 and 2021. Nevertheless, looking at the data in the context of each of these years might offer insight into the boon in outcomes through a virtual modality in 2020 when virtual was the only way to connect with new people. This impact might be diminishing in 2021 as schools and other activities began to return in-person and zoom fatigue had fully taken hold.

Perhaps the most interesting result in the data is the incredible difference in outcomes for 9th and 10th graders versus 11th and 12th graders when modality is accounted for. 10th graders in particular greatly benefit from in-person programs while experiencing a decline in the index through virtual work. Meanwhile, 12th graders get stronger benefits from virtual programs than in-person.



What we can statistically observe related to this index is that some drivers of the disparities between 10th and 12th grade seem to be related to the extent to which participants felt they believed people really care about them. This data couples with the program implementation reality as related to how and when authentic relationships are built for high school students.

Program Reality

Given the disproportionate outcomes for students at different grade levels through different program modalities, it is important to understand what elements of the program may be contributing to positive or negative outcomes in relationship development. This exploration will inform how program modalities can be developmentally aligned across not only PENCIL’s portfolio, but the broader field as well. Based on conversations with school leaders and corporate volunteer leads we understand that some virtual programming will be here to stay. However, we must examine the parts of virtual work that work best for what age group and when and why it might be necessary to require in-person engagements to bolster program outcomes.

Near-Peer Networks– 10th graders engaged in PENCIL partnerships are typically in mixed groups with peers in the upper grades. In-person sessions offer these students opportunities to interact and establish relationships not only with the PENCIL volunteers, but with older students they may not otherwise interact with. 10th grade students are then able to build meaningful relationships with these students through informal meetings between classes and after school. PENCIL sessions address the important role of near-peer relationships as part of a larger support system, with volunteers sharing their experiences and demonstrating the value of these relationships for both the older and younger student. Through these conversations, all students are encouraged to connect outside of sessions and making younger students attempts to build relationships with older students more likely to be accepted and returned. Students in the virtual setting, while exposed to the same peer group and conversations, are not presented with natural touchpoints outside of the partnership and any connections made during a session stay siloed in the context of the partnership and never grow into meaningful relationships.

Partners in Key Decisions – As students enter 11th and 12th grades, they begin their college search and face many choices around their academic and professional future after high school. PENCIL partnership sessions address these topics, offering students not only information but access to volunteers to serve as mentors. PENCIL volunteers work in small groups with students and serve as a valuable resource to share experiences in different post-secondary settings, offer guidance on choosing a school, and provide a longer-term perspective as students

navigate this complex landscape. For 12th graders who are finalizing significant decisions around college and preparing to enter a vastly different environment, virtual programs are especially valuable as they offer the ability to connect with adults with wide range of backgrounds and personal college experiences otherwise inaccessible to students. Students may be more open to relationship building and value these relationships more at this point, regardless of session format (in-person or virtual) because of the immediate need for and value from their connection and interactions with volunteers.

Ideal Conditions – Many schools first introduce students to the concept of a network and mentorship through advisory classes, extracurricular activities, or standalone workshops in the 9th and 10th grade. These sessions are effective in piquing students interests and explaining the value of networks and mentorship; however, they rarely provide access to adults necessary for students to begin building these key connections. PENCIL partnerships create the ideal conditions for older students familiar with the concept of networks and actively interested in creating one, but who have lacked the necessary time and access to volunteers. While all PENCIL programs promote interactions between students and volunteers, PENCIL’s virtual programs have adapted their focus and structure to allow for more open conversations between students and volunteers, with shorter presentations and fewer structured activities. This shift was a direct result of requests from students who wanted more time to connect with volunteers. The space for connection provided by PENCIL, coupled with a foundational knowledge of the importance of mentors, create ideal conditions for students to build meaningful relationships with volunteers in the virtual environment.

Recommendations

PENCIL, like many youth-serving nonprofits as well as schools, was forced into virtual program delivery due to the pandemic. The switch to virtual was reactive, born out of necessity and crisis, but all signs point to virtual delivery remaining a modality for some learning and programming. A virtual modality allows for students to engage with people across geographic distance, welcoming students to a world far beyond New York City. Virtual programs also address some student and family concerns about travel in a city like New York where there have been increasingly public and widespread instances of violence. Yet, just like most things, there is a time and a place to leverage the benefits of virtual programs. The results of PENCIL’s evaluation demonstrate that the virtual modality can be effective for older students who have already built a foundation of agency and comfort working with adult volunteers. Building that foundation with younger students is key to any success in the virtual space and the data presented tells us that the foundation for quality relationships needs to be built in-person for younger students. How in-person and virtual work complement each other will be important for PENCIL, its peers, and the city’s schools to understand when supporting the unique needs of young people at each stage of their development. To that end, following are several recommendations for the field as well as PENCIL’s own program enhancement.

Prioritize in-person programs for younger high school students to build a foundation that enables them to develop relationships regardless of program modality. The biggest variable introduced to PENCIL’s programs over the past two years was the change in modality. As such, in this evaluation, PENCIL wanted to understand that impact on program success and outcomes. While generally in-person presented only marginally better, in disaggregating the data the virtual modality was not effective, and potentially defective, for 10th graders. Considering what students experience in the early half of high school, deeper program models that cut through the stress and changes around them while encouraging group formation with peers as well as volunteers are necessary to foster more meaningful connection. It appears that one variable to support deeper connection is the ability to be in-person. Furthermore, given concepts of networking and social capital are newer to young students it may be harder for them to fully realize abstract concepts in an abstract (i.e., virtual) environment. Building these foundational concepts, and practicing with those concepts, in a live, in -person environment, needs to be applied in programs for younger students. Not only might in-person work enhance outcomes for 10th graders, but it may also have a lasting effect in their ability to leverage future opportunities to build relationships. Moving forward, it will be important for PENCIL and its peers to ensure any career programs with 10th graders that center around relationships with volunteers are delivered in-person rather than virtually. Virtual program engagements should be reserved for older students taking into consideration the next few recommendations.

Align volunteer/student interactions with timely needs and decisions of students. Just because students gain access to volunteers from a variety of industries, does not automatically mean relationships of value will flourish. Students are faced with different types of decisions over the course of their high school trajectory. If the ways volunteers engage with students do not align with supporting the specific decisions they grapple with each year, the value of that relationship might diminish. Furthermore, as students get older the specificity and gravity of decisions increase. Such decisions can be discussed through focused facilitation in-person or virtually. On the other hand, younger students might be in a more exploratory phase and need tangible in-person experiences to learn, ask questions, and begin articulating goals and aspirations. Activities, experiences, and modalities through which volunteers support the timely needs of students should be considered when planning programs and interactions. While New York City may be working towards the north star of career success for all young people it is important to remember that there are small decisions and steps along that way for which students are seeking advice and counsel. Jumping straight to big life changing decisions when students are younger, before meeting in person, may not resonate at that time and may create a perception that the adult volunteers are out of touch with their needs and experience. As the city builds more structure and programming related to student pathways it is important to take a step back and tend to the fundamental building blocks that make up those pathways.

Harness the potential of virtual engagements with purpose and intentionality. The results of this evaluation demonstrate that while virtual programs should not be a default for younger students, they should absolutely be leveraged for older ones. Nearly every sector has articulated that virtual modalities are here to stay for work, learning, and recreation. As we think about virtual modalities in service to student success, there is a tremendous amount of potential. Virtual programs allow students to meet and learn from volunteers across the globe which can increase the diverse representation students see across industries as well as a variety of values and norms associated with “success.” Technology can be further harnessed to welcome students into corporate spaces and places that are currently inaccessible due to geographic distance or other barriers. Creating access to people and places in this way can excite older students as they embark on their own journeys beyond high school and beyond New York City. As schools and partners embed technology fueled opportunities into program and curriculum it will be important to consider logistics, hybrid facilitation, and the true level of effort necessary to organize and implement these experiences.

* * *

PENCIL will continue to evaluate the programs delivered virtually compared to in-person work and ensure our own programs incorporate the improvements discussed above. Additionally, as NYC considers new models during the 2022-23 academic year, PENCIL looks forward to working with and learning from the many partners in the city to understand the opportunities to build meaningful relationships with students and volunteers across program modalities. We encourage the sharing of data, observations, and models to achieve that end and are happy to widely collaborate.

ⁱ Chetty, Raj et al. (2022). Social Capital I: Measurement and Associations with Economic Mobility. Nature.

ⁱⁱ Roehlkepartain, E. C., et al. (2017). Relationships First: Creating Connections that Help Young People Thrive. Minneapolis, MN: Search Institute.