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STEP-UP PROGRAM

SOCIAL INNOVATION FUND

**YEAR 4 (FINAL) IMPACT AND IMPLEMENTATION
EVALUATION REPORT**

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Research, Development and Engagement to Improve Education

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About this Report

This evaluation report is a Final Report for the STEP-UP program and is intended to fulfill the SIF requirements to determine at least a moderate level of evidence for funded projects. It includes impact and implementation studies focused on the cohort of interns who completed internships in the summer of 2016.

Executive Summary

Program and Background Information

STEP-UP is a youth employment program for Minneapolis youth ages 14-21. STEP-UP serves youth who face some of the greatest barriers to employment, including youth from low income families, youth from immigrant families, and youth with disabilities. STEP-UP provides two levels of coordinated support and internship opportunities. Achieve is for students ages 16 – 21 while Discover is for ages 14 – 15. STEP-UP is a partnership among the City of Minneapolis, AchieveMpls, Department of Employment and Economic Development (DEED) and Project for Pride in Living. STEP-UP recruits, trains, and places youth in internships¹ with a wide range of Twin Cities businesses, nonprofits, and public agencies. The intended short-term outcomes for participants include an increase in professional and life knowledge and skills (employability) and improved school outcomes. Longer term outcomes are increased graduation rates, increase in college or other post-secondary enrollment, increase in college persistence and obtaining a post-secondary degree, increase in employment rates, and increase in earnings. In the summer of 2016, 1,272 youth completed internships.

Prior Research, Targeted Evidence

The literature search by Michlin and Schultz (2016) found limited evidence for the effect of summer youth employment programs (SYEP). The authors concluded that while there is funding and implementation nationwide for these programs, the data on program effects are mixed. Among the studies that have been conducted, “there seems to be a lack of emphasis on evaluating and reporting data on the effects of SYEPs.”

Prior to this report, three interim implementation evaluations (for the summers of 2014, 2015, and 2016) and two interim impact evaluations (for 2014 and 2015) were conducted and reports submitted to CNCS. This report examines STEP-UP impact on students who participated in the program in the summer of 2016 and compares results with participants from the summer of 2015.² The report also looks at implementation data for the summer of 2016 and compares results to the summer sessions 2014-2015.

The impact study includes two designs to examine the effects of STEP-UP on school outcomes and employability. The first, a quasi-experimental matched-groups design, examined the program’s effect on educational outcomes and post-secondary enrollment and targeted a

¹ Throughout the report the summer work experiences of STEP-UP are called jobs and internships interchangeably. Program staff members use both terms and we follow their practice in this report.

² While an impact study was conducted in 2014, the analyses were not separated for the Discover and Achieve levels, making the results not directly comparable.

moderate level of evidence. The confirmatory question was, “Does the STEP-UP summer jobs program improve school outcomes?”

The second design was a quasi-experimental one-group pretest-posttest within participants design. It addressed the exploratory questions, “Do the Achieve participants achieve better school outcomes pre- to post-program?” and “Do the Discover students achieve better school outcomes pre- to post-program?” The same design was used to address the exploratory questions, “Do the Achieve participants achieve better employability outcomes pre- to post-program?” and “Do the Discover participants achieve better employability outcomes pre- to post-program?” and “Do participants with different experiences (number of hours worked per week, number of weeks worked, participating in the program for one or multiple years) achieve better school and employability outcomes?” The second design targeted a preliminary level of evidence.

Evaluation Design Overview

The first design compared interns to non- STEP-UP Minneapolis Public School (MPS) middle school and high school students. Intern comparison groups were formed based on propensity score matching using demographic variables. School outcomes included GPA (grade point average), ACT scores, Minnesota Comprehensive Assessment (MCA) scores³, attendance, behavior (referrals, removals and suspensions⁴), graduation rates, on-track to graduate status, and post-secondary enrollment. Except for post-secondary enrollment, school-based outcomes were obtained through administrative and demographic data collected by MPS and STEP-UP. Post-secondary data were provided by MN SLEDS⁵ (Minnesota Statewide Longitudinal Educational Data System). Employability outcomes were collected using a student survey developed by CAREI and STEP-UP staff.

For the between-groups design we used independent *t* tests, ANCOVA, logistic regression,

³ The ACT is a college admissions test, used to assess academic readiness for college. It is administered to eleventh graders in Minneapolis Public Schools. The Minnesota Comprehensive Assessments (MCA) are the state tests that help districts measure student progress toward Minnesota’s academic standards and also meet federal and state legislative requirements. Reading is given in tenth grade and math in eleventh.

⁴ A suspension is when a student is sent home and misses more than one day of school. A removal is when a student is removed from the classroom for a specified period of time or is sent home for a day or less. A referral is any other type of administrative response that is not either a suspension or a removal.

⁵ SLEDS matches student data from pre-kindergarten through completion of postsecondary education and into the workforce to identify pathways for individuals in achieving successful outcomes in education and work; to inform decisions to support and improve education and workforce policy and practice, and to assist in creating a more seamless education and workforce system for all Minnesotans. The Minnesota P-20 Education Partnership governs the SLEDS system. The project is managed jointly by the Minnesota Office of Higher Education (OHE) (opens new window), Minnesota Departments of Education (MDE), and Employment and Economic Development (DEED).

Mann-Whitney U, and chi-square analyses to determine if there were significant differences on school outcome measures between STEP-UP interns and the comparison non-STEP-UP students. The analysis included students enrolled in Minneapolis Public Schools and analyzed outcomes for 270 interns and 186 matched students at the Achieve level and 227 interns and 153 matches at the Discover level. The propensity score models did not include variables representing prior academic achievement, and therefore we did not know if there was baseline equivalence between interns and matched students on the outcome variables in the year prior to the program. Therefore, we refit our models to control for prior achievement in the assessment of outcomes in the school year following the program.

The second design, used to document program specific gains for interns, compared educational data from the school year prior to the internship to data from the school year after the internship. Employability gains were from the time of training (February/March) to the end of the internship (mid-August) of the same year and were measured using a survey in which interns rated themselves on a series of items. Employability outcomes included attitude, occupational or professional knowledge, future orientation, 21st Century skills such as teamwork and communication, and professional networks.

For the within-group design we used paired-samples *t* tests, McNemar's test, and chi-square tests to compare school outcome variables for the school year before the internship and the school year after the internship. We analyzed data for 270 Achieve interns and 227 Discover interns.

On employability outcomes, we used the Wilcoxon signed-rank test to examine if the rank orders on the disagree/agree Likert type scale were the same or different for students pre- and post-internship. Pre- and post were the nominal level independent variables and the dependent variable was the response to each question on the Likert type scale. Employability analyses used data on 696 interns, 333 from Achieve and 363 from Discover.

Research Questions

Impact Evaluation Questions: *Confirmatory*

1. Does the STEP-UP summer jobs program improve school outcomes?
 - a. Do the Achieve participants achieve better school outcomes than comparison group students?
 - b. Do the Discover participants achieve better school outcomes than comparison group students?
 - c. Do STEP-UP participants have a higher postsecondary enrollment than the comparison group?

Impact Evaluation Questions: *Exploratory*

1. Does the STEP-UP summer jobs program improve school outcomes?
 - a. Do the Achieve participants achieve better school outcomes pre- to post-program?
 - b. Do the Discover students achieve better school outcomes pre- to post-program?

2. Does the STEP-UP summer jobs program improve employability outcomes?
 - a. Do the Achieve participants achieve better employability outcomes pre- to post-program?
 - b. Do the Discover participants achieve better employability outcomes pre- to post-program?
3. Do differential experiences in the STEP-UP summer job program – internship quality, length, longitudinal experience, and/or additional training – lead to differential outcomes on school and employability measures?
 - a. Do students who work longer work weeks and/or more weeks in the program have better outcomes?
 - b. Do students who work for STEP-UP multiple years in a row have better outcomes?

Implementation

1. Has the STEP-UP program implemented all of its major components with fidelity?
2. To what extent has the STEP-UP program increased its outputs over time?
3. How do perceptions of the STEP-UP Program impact applications and retention?⁶

Study Logistics

The study proceeded as planned. There were no issues or changes to the timeline or budget. There were no changes to evaluation personnel at CAREI. The research/evaluation staff position at AchieveMpls changed over the period of the grant; five different people held the position. Those changes did not affect the conduct of the study. There were no problems with the IRB.

Findings

Impact: Confirmatory/Moderate Evidence. The evaluation for 2016 for all STEP-UP participants (and for Achieve in 2015) demonstrated moderate evidence of a small positive effect on students' being on track to graduate in four years. The evaluation did not find moderate evidence of positive program effects on other school outcomes, academic or behavioral, including post-secondary enrollment. The results did not change when controlling for prior achievement. One possible explanation for these results is that STEP-UP does not specifically target school-related skills in its trainings or internships. Using school outcomes, then, may be neither a desirable nor a realistic way of measuring the impact of the program on its participants. If changes in school-related metrics were the goal of the program, these school outcomes would need to be targeted more explicitly.

In the area of behavior outcomes, most interns were not involved with the disciplinary system either before or after the internship, though in almost all categories a higher percentage avoided

⁶ This set of questions about perceptions was added to the SEP modification that was approved in September, 2016. In light of the recognition by program staff that there are eligible students who miss the opportunity to do a STEP-UP internship (including students who apply and even participate in training), project staff wanted to explore perceptions of the program by teens and to use their learning for improving program recruitment and retention. See the methods and findings sections for further information about the study.

the disciplinary system the year following the internship than the year before. Of those students who had behavior incidents in the years prior to the internship, many had none the year after.⁷ In contrast, there were students who did not have incidents in the year prior to the internship who *did* have them in the year after. It may be that participation in STEP-UP influenced students whose behavior improved. In light of the fact that some students with no behavior incidents before the internship had them the following year, we have to consider that factors other than the program had an influence on behavior change.

Impact: Exploratory/Preliminary. The exploratory impact study sought preliminary evidence about whether interns achieved better employability outcomes pre- to post-program. In 2016, both Achieve and Discover interns improved in job-related skills: knowing what questions to ask in an interview, what questions to expect in an interview, and identifying people to use as professional references. These outcomes were consistent with the results of 2015.

In addition to the skills mentioned above, in 2016 Achieve interns showed positive changes in self-assessments of a number of personal skills.⁸ Other than the interview and references skills Achieve interns did not show change in employment-specific skills pre- to post.⁹ In 2016 Discover interns showed positive changes in their self-assessments of other employment-specific skills: knowing what clothes to wear to work, oral and written communication in a professional setting, and creating a professional resume.¹⁰ They did not show positive changes in their self-assessments of personal skills (e.g., taking initiative, problem solving). It is possible that Discover students, because they most likely had less experience in a work environment, had more to learn about workplace decorum and practices. Achieve interns, older and more mature, may have been more self-aware or more open to personal growth.

The exploratory analyses examining differences for interns who worked more hours per week or more weeks per year showed no differences in employability outcomes. There were some

⁷ At the Achieve level, of students with referrals in SY15, 66% fewer had them in SY16; of students with referrals in SY16, 88% fewer had them in SY17. Of students with removals in SY15, 68% fewer had them in SY16; of students with removals in SY16, 100% fewer had them in SY17. Of students with suspension in SY15, 79% fewer had them in SY16; of students with suspensions in SY16, 75% fewer had them in SY17.

At the Discover level, of students with referrals in SY15, 68% fewer had them in SY16; of students with referrals in SY16, 74% fewer had them in SY17. Of students with removals in SY15, 82% fewer had them in SY16; of students with removals in SY16, 65% fewer had them in SY17. Of students with suspension in SY15, 59% fewer had them in SY16; of students with suspensions in SY16, 47% fewer had them in SY17.

⁸ Staying calm under stress, accepting criticism, looking for additional tasks when work is complete, and breaking problems into small parts to solve them. The difference on breaking problems into small parts to solve them was not statistically significant after correcting for multiple comparisons.

⁹ After correcting for multiple comparisons, the difference on naming references was not statistically significant from pre to post.

¹⁰ After correcting for multiple comparisons there was not a statistically significant difference pre to post on resume writing.

differences for interns with more than a single year of experience. Both Achieve and Discover interns had better outcomes about interview skills, and two personal skills and one employment-specific skill. This suggests that having an internship for more than a single year may improve some employability skills.

Implementation. STEP-UP implemented all components of the program with fidelity. The numbers of eligible applicants (3,447), students accepted (3,447), students completing work-readiness training (2,036), students placed in internships (1,389), students completing internships (1,272), number of companies (226), and number of supervisors (513) all increased in 2016 compared to 2015. Most of the numbers were lower in 2016 than in 2014. In all categories where there were targets, actual numbers were lower than the 2016 targets.

Among students who completed internships in 2016, there were more girls than boys (57% vs. 43%). The racial/ethnic breakdown was 33% African Americans, 29% ethnic Africans, 11% Asians, 9% Hispanic, 6% Native Americans, 6% white, and 6% other or unidentified. Of completing interns, 90% were eligible for free or reduced price lunch. Just over 2/3 of Achieve interns held paying jobs prior to the internship; nearly 2/3 of Discover interns had never held a paying job. These statistics are roughly comparable to 2014 and 2015.

There were high levels of satisfaction with the program among youth who completed an internship and among supervisors. Interns reported benefits such as personal learning and growth, professional learning, and the building of relationships. Supervisors reported benefits such as supporting the development of youth, energy and perspectives of youth in the workplace, expanding their supervisory/mentoring skills, learning about interns' cultures, and getting help at their sites.

Recommendations

While this report concludes the SIF external evaluation, there are several areas of research that may be beneficial to AchieveMpls, the City of Minneapolis, and others in the field of youth employment regarding the benefits of internships on youth.

1. Continue to examine longitudinal data to see if there are differences between a comparison group and interns. Because of the length of the grant, this evaluation was not able to access data on many participants who completed post-secondary education and entered the workforce. It is possible that participation in STEP-UP internships will have an impact on these outcomes, but we were not yet able to access data to examine this possibility. Tracking more youth over a longer trajectory and examining variables such as college graduation, type of employment, and wages could demonstrate longer-term impacts of the program.
2. Focus on the use of other outcome measures to measure program impact. Short-term

school outcomes do not show many positive effects of the program. This is logical given that the elements of the program (training, internship, career enrichments/specialized training) do not specifically target these outcomes. We know from survey responses that the program is having an influence on interns—expanding their consciousness about what the world of work is like, developing their networks in the professional community, helping them imagine what kind of career they might like and what path they need to take to achieve it, and becoming more comfortable in the workplace.

Developing an instrument to measure these findings and comparing them to peers over time may provide useful information for the program going forward. We encourage STEP-UP to move in the direction they are considering. A retrospective pre-post instrument on which program participants can think more carefully about their growth rather than simply rating themselves could be helpful. One way to develop an instrument is to conduct interviews and/or focus groups to help develop pre-post questions. It may also be possible to collaborate with Minneapolis Public Schools on its measures of social and emotional learning instruments. The results could compare supervisor ratings of students.

3. Consider a rigorous exploration of the dynamic between the supervisor and the intern as a contributing factor to success. This could draw on and contribute to the extensive research base on coaching/mentoring youth (and connects to other programs run by AchieveMpls). Interviewing both supervisors and interns could identify key factors that influence a productive internship as well as some of the longer-term goals of the program.

Growing out of the implementation and impact studies, there are a number of steps the program could consider for strengthening the work of STEP-UP.

1. As the curriculum for training interns is revamped, align training curriculum for interns more closely with the desired employability outcomes. Having seen changes in the students' self-ratings on skills specifically in the training (e.g., interviewing skills), the evidence suggests that even over a short period of time it is possible to influence the growth of participants in the program.
2. Better align training and oversight of supervisors with the desired employability outcomes for interns. Provide increased support throughout the internship period that focuses on these outcomes. In the 2016 and 2017 program seasons, STEP-UP staff members took steps to work with the supervisors to encourage their intentional work with interns on employability outcomes. This continues to be an area of potential development for the program, though not a simple one to achieve given the challenges of finding supervisors, constraints on the time supervisors have available for working directly with

interns, skills of the supervisors, constraints on STEP-UP staff time, and of course, the complex nature of many of the employability outcomes.

3. Revamp the logic model to eliminate school outcomes that are not impacted by the program and continue to revise it as other outcome are demonstrated to have positive effects.

Introduction

Purpose and Audience

The purpose of the evaluation was to examine the implementation and impact of the STEP-UP internship program for the summer of 2016, outlining the enduring elements of the program over time, as well as changes to the program during the period of funding from SIF through Greater Twin Cities United Way in partnership with Generation Next. This evaluation report is submitted to the Corporation for National and Community Service (CNCS) and its Social Innovation Fund (SIF). Its findings are also directed to SIF grantees, Generation Next and the Greater Twin Cities United Way, and to the subgrantee, AchieveMpls, and their partner in the STEP-UP program, the City of Minneapolis.

Theory of Change

Intended outcomes. The intended short-term outcomes for STEP-UP student participants include improved attitude, satisfaction of experience, increase in work-related skills, increase in occupational/professional knowledge, improvement in 21st Century skills like teamwork and communication and increase in professional capital. Moderate-range outcomes are improved educational achievement, improved school attendance, improved school behavior, and improved school engagement. Longer term outcomes are increased graduation rates, increase in college or other post-secondary enrollment, increase in college persistence and obtaining a post-secondary degree, increase in employment rates and increase in earnings. The anticipated impacts are a more diverse and skilled workforce in entry-level professional careers, particularly in the targeted pipeline areas; program alumni with high wages, high quality occupations, and high qualities of life; and employers better prepared to employ a more diverse workforce (see Appendix A for the STEP-UP theory of change and logic model).

Prior research and level of evidence. Prior to this evaluation, the evidence for STEP-UP's efficacy was at a preliminary level. One study conducted by University of Minnesota researchers used propensity score matching to examine academic outcomes of STEP-UP students (Maruyama, VanBoekel and Cobie, 2013). The results showed that the STEP-UP program had a marginally significant impact on standardized test scores in certain sub-groups but did not have an impact on behavior or attendance. The present study used only MPS students, which account for about 60 percent of the STEP-UP students.

Targeted level of evidence. This study used two designs. First, a quasi-experimental matched-groups design examined the program's effect on educational outcomes and post-secondary enrollment and targeted a moderate level of evidence. The confirmatory question was

“Does the STEP-UP summer jobs program improve school outcomes?” See a fuller explanation on pg. 23 below.

The second design was a quasi-experimental one-group pretest-posttest within participants design. It addressed the confirmatory questions, “Do the Achieve participants achieve better school outcomes pre- to post-program?” and “Do the Discover students achieve better school outcomes pre- to post-program?” The same design was used to address the exploratory questions, “Do the Achieve participants achieve better employability outcomes pre- to post-program?” and “Do the Discover participants achieve better employability outcomes pre- to post-program?” The second design targeted a preliminary level of evidence.

Program Description

STEP-UP is a youth employment program for Minneapolis youth ages 14-21. STEP-UP serves youth who face some of the greatest barriers to employment, including youth from low income families, youth from immigrant families, and youth with disabilities. STEP-UP provides two levels of coordinated support and internship opportunities. Achieve is for students ages 16 – 21 while Discover is for ages 14 – 15. STEP-UP is a partnership among the City of Minneapolis, AchieveMpls, Department of Employment and Economic Development (DEED) and Project for Pride in Living. STEP-UP recruits, trains, and places low-income youth in paying jobs with a wide range of Twin Cities businesses, nonprofits, and public agencies. The program has both school year and summer internships; the latter serve the bulk of participants. The work readiness training is credentialed by the Minneapolis Regional Chamber of Commerce. STEP-UP helps interns explore diverse career interests, gain vital skills, make professional connections, and prepare for meaningful careers. At the Achieve level, most interns’ salaries are paid by the employers.¹¹ At the Discover level, salaries are paid by the City of Minneapolis.

The STEP-UP programming cycle for the summer internships program runs from December through August. Beginning in December, STEP-UP staff members recruit students to apply to the program before the application deadline in late February. Generally, all eligible students are accepted to the program and invited to job trainings occurring throughout the spring. In 2016, STEP-UP received 3,447 eligible applications. Two-thousand two-hundred students completed work-readiness training in 2016. During the training period, older students (16+) submit an additional online application to provide information that will be used to identify what types of job opportunities would be most appropriate and interesting for each student. (In 2014 and 2015, younger students (14-15) also submitted this additional application.) In May and June, students

¹¹ AchieveMpls also secures some foundation funding to subsidize wages.

are placed with employers.¹² Students complete their internships by mid-August, although exact start and end dates are determined by each employer. In 2016, 1,389 students started internships and 1,272 completed internships.

Recruitment. STEP-UP recruits both students and employers. During the fall, winter, and spring, recruiting employers and identifying specific internship positions are key activities of STEP-UP staff from AchieveMpls and the City of Minneapolis. Student recruitment takes place during the first half of the school year. Students submit applications electronically.

The majority of recruitment efforts take place when the online application opens in December. Although the program serves youth 14 to 21 years old, STEP-UP program associates are assigned schools for recruitment purposes, including the seven comprehensive Minneapolis Public Schools district (MPS) high schools and MPS alternative schools. STEP-UP staff work closely with school leadership in developing recruitment plans, a process that starts with the MPS Superintendent sending a letter of endorsement of the program and request for support to all high school principals. Staff members use several different methods including classroom presentations, targeted after school group presentations, lunchroom tabling, school announcements, signs in schools, parent and student newsletters, posters, flyers, a video, and meetings with school staff. Staff hold regular after school application help sessions to assist students with their applications and answer questions about the program. STEP-UP also directs communication about the internship program and resources (a recruitment “toolkit”) to MPS middle schools, Minneapolis’ charter and private schools, and schools in nearby suburbs where some Minneapolis students attend, and to community based and education focused nonprofit partners whose youth workers help spread the message and support application completion.

In 2016, STEP-UP revamped student recruitment flyers and presentations based on findings of a 2015 qualitative study of student perceptions of the program. Staff focused on targeted participant populations and developed new messaging themed around (a) empowering and unlocking potential, (b) making money, and (c) the opportunity for students to shape their own experience within the program. The new approach also focuses on clarifying the breadth of opportunities available across program components without burdening recruits with excessive information regarding the process.

The majority of students who apply are accepted and invited to participate in training. Each year there are students who are not accepted into the program because they do not meet the following eligibility requirements: live in the City of Minneapolis, between the ages of 14 and 21, not

¹² Due to the number of available internships, not all students who are eligible and interested are placed in internships.

enrolled in college and either have a qualifying income or meet standard barriers to employment indicators (in foster care, have an IEP, pregnant or parenting, English language learner, homeless or highly mobile, or involved in the criminal justice system).

Training. STEP-UP provides four distinct training tiers, with student training schedules and curricula differentiated by participant age and prior experience in the program. While learning targets are distinct across the 4 tiers, objectives for the training focus on distinguishing between jobs and careers, networking, landing a job, employment documentation and onboarding procedures, resumes, interviewing, workplace communications, workplace expectations/professional etiquette, attitude and character, problem-solving and decision-making, workplace ethics, supervisor role, and the importance of feedback/developing a continuous improvement mindset. The curriculum for the Discover trainings was not changed from 2015. This curriculum was originally revised and piloted prior to Summer 2013. Many of the curriculum modules were selected from an existing US Government resource¹³, “Soft Skills to Pay the Bills,” and adapted for the STEP-UP context. To a lesser extent they included pieces from “Learning for Life.”¹⁴

In 2016 the structure of the training was the same as in 2015. The trainings were day-long events on Saturdays and took place at Minneapolis Community and Technical College in downtown Minneapolis.

Trainers for all the high school students were either staff of AchieveMpls or individuals with whom Achieve contracts to conduct training programs. Train the trainer sessions were held prior to the launch of the student training. Overall, 2,036 students participated in training.

STEP-UP Achieve (Youth 16-21 years of age). Trainings were offered on four consecutive Saturdays; each youth was expected to participate in one day of training. Intake interviews were scheduled on the same day as training. Mock interviews were held separately during the following month. Training and interviews totaled 9 hours.

STEP-UP Achieve: Advanced (Youth 16-21 years of age who have already completed an Achieve level internship). Training for Advanced level interns was revamped in 2015. Areas of skill development were similar to the Achieve level, but interns worked on attaining a higher

¹³ www.dol.gov/odep/topics/youth/softskills/

¹⁴ The Learning for Life Corporation offers seven programs designed to support schools and community-based organizations in their efforts to prepare youth to successfully handle the complexities of contemporary society and to enhance their self-confidence, motivation, and self-esteem. The programs focus on character education and career education.

level of competency. Workshops to address specific skills were conducted by volunteers in training/talent development roles at companies that hire interns. In addition to the workshops, the Advanced training included keynote addresses by professionals and former STEP-UP interns, making the format more like a professional conference. Students also had the opportunity to choose sessions that reflected their interests. Training and interviews totaled 9 hours.

STEP-UP Discover: High School (Youth 14-15 years old and in high school). Trainings were held on four consecutive Saturdays; each youth was expected to participate in two days of training. Mock interviews were held separately during the following month. High School Discover trainings were conducted by AchieveMpls. Training and interviews totaled 14 hours.

STEP-UP Discover: Middle School (14-15 years old and in middle school). The training and placement of interns in the Discover section of STEP UP is coordinated by the City of Minneapolis. The city contracts with Project for Pride in Living (PPL) to conduct trainings for Middle School Discover students. The curriculum for Middle School Discover student training is coordinated with that of the high school training. Topics are similar, but the content is more basic since it is designed for younger students who are less likely to have had experience in the world of work. Some of the materials used are from the curriculum Soft Skills to Pay the Bills. In 2016 these trainings took place at Minneapolis Community and Technical College (MCTC) on two Saturdays in March for a total of 12 hours of training. Middle school youth do not attend a mock interview.

The training culminates in a series of mock job interviews with hundreds of volunteers from the city's professional community. All graduates of the training who go on to successfully complete a summer internship receive a work-readiness credential certified by the Minneapolis Chamber of Commerce. A detailed summary of the training curriculum is provided in Appendix B.

Summer Internships. The paid summer internship is the key component of the STEP-UP program. Most internships run for nine weeks from mid-June to mid-August. Some internships, however, are shorter in length while others are longer. Interns' work opportunities are in either STEP-UP Achieve (for youth ages 16-21) or STEP-UP Discover (for youth ages 14 and 15). STEP-UP Discover, which is run by the City of Minneapolis in coordination with AchieveMpls and the Minnesota Workforce Centers, offers foundational, entry-level jobs in nonprofit organizations for youth with limited work experience. STEP-UP Achieve offers more challenging internships; Achieve interns are placed at private companies, government agencies, educational institutions and nonprofits and employed directly by those companies. The City of Minneapolis contracts with Workforce Centers to provide job coaches to support Discover interns and employers during the internship experience. AchieveMpls staff serve as job coaches

to offer training and support both to Achieve interns and their supervisors. In the summer of 2016, 1,389 students were placed in internships and 1,272 completed internships.

Placement. Once a student has completed training and submitted required paperwork, he or she is eligible to be matched with internship positions and placed with employers. Students who are not matched to positions are provided with a list of resources for finding a job without the program. The process of matching students to internships differs for Achieve and Discover.

Achieve. Achieve interns are matched with jobs by AchieveMpls staff members. To be eligible, a student must have completed training. Achieve has developed a philosophy of placement; its goal is to create the best matches for the benefit of all interns and partner companies. The best match or placement for any single position is balanced with what is best for the entire pool of interns and available positions.

Interns are placed in a wide range of industries. STEP-UP Achieve interns work in career-oriented internships in private sector businesses, public agencies, and nonprofits on a rolling basis throughout the month of May. As companies submit their internship position description via an online form, Achieve staff review them for fit, assign them to a select list of “job types” and designate some as being “high priority” placements (based on position/employer requirements and timeline required for intern onboarding). These priority placements are the first positions Achieve staff fill in the placement period. Achieve staff members use a database with job descriptions and information about the students (including applications and resumes) to create matches. They make matches on the basis of the interns’ industries of interest; their skills; their availability; their transportation opportunities; and whether they have completed specific training for certain career areas. These must align with the internship positions’ requirements for work schedule, location of employment, skills required, and industry of employment. STEP-UP sends companies the resumes and contact information for their matched interns. Interns receive notification of their placement and a job description. Supervisors are expected to contact the intern candidates within 3 days to schedule an interview. The interview is meant to ensure that the intern and the supervisor feel secure that the internship will be successful. If after the interview either party determines that it is not a good fit, STEP-UP works to place another candidate in the position, and makes the youth available for placement into another position.

Funding for Achieve internships comes primarily from the employers. AchieveMpls also secures some foundation funding to subsidize wages. Achieve interns are paid at least state minimum wage, and salaries vary depending on the internship. The pay rate for each position is set by the company or organization, based on their assessment of the value of the position and the work they expect to be produced.

As in the past, there were fewer jobs available in 2016 than students who applied and completed training. Some students, because of family commitments or summer school, withdraw their applications even after completing training.

Discover. Middle school and high school Discover youth who complete work readiness training have an intake interview with the Minneapolis Workforce Center (contracted by the City of Minneapolis) at the Minneapolis Convention Center. Students are required to bring employment eligibility, age and identity documents with them to the appointment. Each student meets with a job counselor, reviews the internship application and talks about availability, interests and skills. The job counselor reviews open jobs and helps the student select a job that is a good fit. The student is then given a job description and told that their supervisor will contact them in the next few weeks. STEP-UP staff later follow up with supervisors to provide a list of youth and asks them to call the youth to come in for an introduction or interview. Interviews are optional, but encouraged, at the Discover level

STEP-UP Discover interns, who are younger or have limited work experience, serve in entry level jobs in nonprofit organizations. Their program is funded and run by the City of Minneapolis with significant involvement by The Workforce Center.¹⁵ All jobs have the same hourly wage which the city sets.

In 2016 the staff of STEP-UP Discover decided to limit internships to 20 hours per week plus three hours for class (down from 30 hours in 2015). By making the change the City of Minneapolis STEP-UP staff placed 100+ additional Discover youth into paid internships using the same funding for wages as in the prior summer. Achieve interns worked 20 to 40 hours per week.

Preparing and Supporting Supervisors. Prior to the summer, STEP-UP Achieve and STEP-UP Discover provides an employer orientation and a supervisor handbook.

¹⁵ The Minnesota Workforce Center team assists with youth recruitment, matches nearly 1,000 youth into positions, processes payroll paperwork and manages time reporting throughout the summer.

Orientation. The purpose of the orientation is to inform, engage, prepare, and inspire supervisors to establish a work plan and strategy for a successful summer student internship experience—for both parties involved. The orientation is considered mandatory for companies that pledged student placements. In reality, not all supervisors complete the orientation. AchieveMpls revised and expanded its STEP-UP Achieve supervisor orientation in 2016 to make the orientation more practical and engaging for participants and to align it more closely with the interns’ work readiness training. The program also offered continuing education for supervisors as a collaborative effort between STEP-UP and a number of other youth employment programs in the Twin Cities (Right Track, and The Brand Lab, Genesys Works, and Brooklynk). For Discover supervisors, orientation is a mandatory training for staff members tasked with regularly supervising an intern. Topics include STEP-UP overview and partnerships, supervisor responsibilities, tips and resources for how to be a good mentor, and payroll and safety procedures.

Supervisor Handbook. The handbook is provided in hard copy at orientations and is also available electronically to all supervisors. It addresses these topics: adolescent development, STEP-UP work readiness training, the role of the supervisor, building and maintaining the supervisor-intern relationship, and templates to use during the internship (e.g., hire letter, work plan, weekly check-in).

Job Coaches. During the summer internships, STEP-UP staff from AchieveMpls serve as job coaches to the Achieve interns. Discover interns are coached by temporary summer staff from the Workforce Center team.

This oversight helps the program staff to monitor the quality of the internships. In addition, coaches address troubles that arise, both from the perspectives of the employers and of the interns. They mediate difficult situations and coach interns to understand what behaviors are and are not acceptable in the workplace (e.g., being on time, appropriate dress, responding to feedback). They handle intern concerns, such as paychecks and the payment process, as well as difficulties with supervisors. Discover job coaches visit each worksite at least once over the course of the summer, and often twice to check in and troubleshoot challenges with the intern as needed and to ensure the worksite is meeting program expectations. Achieve and Discover sent weekly emails to supervisors with information on upcoming STEP-UP events, best practices and tips for working with interns. Approaches to communicating with supervisors shifted over the course of the grant period, from Constant Contact to electronic newsletters, varying the amount of content and number of images with the goal of increasing readership and understanding of the program.

Specialized Training/Career Enrichment. In addition to general pre-internship required training, STEP-UP, in collaboration with various companies and organizations, offers targeted trainings focused on specific career-related knowledge and skills, career exposure events, and industry-recognized certifications. These take place before and during the summer internship experience. Some are required of interns in particular career fields and open to those interns only, such as Scrubs Camp which serves youth in healthcare internships; others are open to anyone interested. Most are optional. They are promoted to interns both by STEP-UP staff and by employers and are coordinated by AchieveMpls. AchieveMpls categorizes and tracks student participation in experiences that are under 20 hours and ones that last 20 hours or more. Over the SIF subgrant period, some training and enrichment opportunities were offered each year, while some were newly introduced or discontinued each summer. For a description of career enrichment and special trainings offered to STEP-UP interns in the summer of 2016, see Appendix D. In 2014-16, Discover interns participated in weekly training classes (see above, pg. 11). For changes made to Discover summer training, see Appendix C.

Discover: High School and Middle School Summer Training. In addition to the training prior to the summer, Discover interns participate in classes during the internship period. In the summers of 2014-16 interns attended classes were held once a week for eight weeks; this was a vestige in the program from the time when there was not training in the spring for Discover interns. Based on feedback from participants, this piece of the program was changed in 2017 (see Appendix C).

Method: Implementation Evaluation

Implementation Evaluation Questions

The following questions guided the implementation evaluation of the STEP-UP program.

1. Has the STEP-UP program implemented all of its major components with fidelity?
 - a. To what extent have the youth output targets been met? (comparison of current year's outputs to current year's targets)
 - i. How many youth applied to the program?
 - ii. How many youth completed the Work-Readiness training? How many internships did youth complete?
 - iii. How many youth attended extra enrichments? (<20 hours; >20 hours)
 - iv. How many interns completed specialized career trainings?
 - v. How many interns earned work-based learning credit?
 - vi. How much did youth earn in wages in internships?
 - vii. How many youth attended weekly classes?
 - b. To what extent have the employer output targets been met?
 - i. How many companies employed STEP-UP interns?
 - ii. How many supervisors supported STEP-UP interns?
 - iii. In what types of settings did STEP-UP interns work?
 - c. To what extent have systems building output targets been met?
 - i. What enrichment opportunities were offered as part of systems building?
 - ii. What is meant by systems building?
 - iii. How many youth were engaged in the various kinds of enrichment opportunities?
 - d. How do the components of the implemented STEP-UP program compare to those described in the proposal?
 - e. What was the nature of student training for STEP-UP?
 - i. How many training programs were run?
 - ii. What were the purposes of the different trainings?
 - iii. How were the training programs developed?
 - iv. What were the components of the trainings?
 - v. Who participated in the different trainings?
 - vi. How did staff perceive the training: materials, implementation, and reactions of participants? What changes would they make if the trainings are offered again?
 - vii. How did participants perceive the training?

- viii. How could the quality of training be assessed?
 - f. Who were the participants in the program?
 - g. What was the participants' satisfaction with the program?
 - h. What was the quality of the student internships?
- 2. To what extent has the STEP-UP program increased its outputs over time?
 - a. For students?
 - b. With employers?
 - c. Regarding systems-building?
- 3. How do perceptions of the STEP-UP Program impact applications and retention?¹⁶
 - a. How do youth and personnel in MPS perceive the STEP-UP program?
 - b. What factors influence youth to apply to STEP-UP?
 - c. What factors influence youth retention in the STEP-UP program (from application through training; from one year to another)

Implementation Modifications to SIF Evaluation Plan (SEP)

Some modifications to the implementation questions were made in October, 2015 and others were included in the modification approved in September, 2016. Questions that were inadvertently repeated in the original SEP were omitted. The question about extra enrichments was adjusted to reflect the program's differentiation between experiences of 20 hours or less and those of more than 20 hours. The question about academic elective credits was subsumed by another question in the approved SEP with the remaining question reflecting more accurately the language used by program staff and participants. A question was added about the number of internships available to youth because this is the one type of employer output with specific targets. Questions about systems buildings and pipelines were adjusted to reflect the program's shift to an output-oriented focus in this aspect of their work. A question about recognition of work and training experiences were omitted due to lack of data. Finally, a set of questions was added to address an area of significant interest to the program staff—perceptions of the program and their influence on applications and retention in the program.

Data Collection, Measurement, & Analysis: Implementation

¹⁶ This set of questions about perceptions was added to the SEP modification that was approved in September, 2016. In light of the recognition by program staff that there are eligible students who miss the opportunity to do a STEP-UP internship (including students who apply and even participate in training), project staff wanted to explore perceptions of the program by teens and to use their learning for improving program recruitment and retention. See the methods and findings sections for further information about the study.

Data collection, measurement, and analysis for the implementation evaluation focused on outputs, fidelity to program design, dosage, program exposure, participant satisfaction, and perceptions of the program. In terms of satisfaction, the perspectives of both interns and supervisors were explored.

Data Collection. There were several sources of data for this implementation evaluation. Staff members at AchieveMpls and the City of Minneapolis provided program information through written correspondence and in-person interviews. We also drew on program documents such as handbooks and email correspondence, as well as the program's website.

Data about training were collected from 1,916 student participants (94% response rate) at the end of the training period in person using a survey prepared by STEP-UP staff in InspiroScan. It was administered as a paper and pencil survey, and results were compiled electronically using InspiroScan. Data about satisfaction with training come from the perspective of the students. Due to other demands on staff, and since the training curriculum had changed very little in 2016, there was not a debriefing for the trainers in 2016.

Baseline information about interns on employability skills (primarily used for the impact evaluation) was gathered using a survey prepared in InspiroScan Survey developed by STEP-UP and CAREI staff. The questions on the baseline survey in 2016 were revised to align with the MHA Labs¹⁷ Hirability Skills framework (see pg. 37). Program staff hoped that this framework would be used by supervisors over the summer to support their supervision of interns and as a way to measure intern growth on these targeted skills. The baseline survey was administered as a paper and pencil survey to students at the beginning of training; results were compiled electronically and analyzed in SPSS. Students completed the baseline survey (n=2,041), including 85% of those who completed a summer internship.

End of summer intern surveys, developed by STEP-UP and CAREI staff, were administered electronically through SurveyMonkey. Each intern received a unique link to the survey in order to identify results. Staff at AchieveMpls emailed the surveys to all interns and followed up by text messages to increase the response rate. The same employability questions from the baseline survey were included, as well as other questions about experiences in the internship. Results were compiled in Excel through SurveyMonkey and were analyzed in SPSS. Four hundred seventy-three Achieve interns (77% response rate) and 406 Discover interns (62% response rate) completed the end of summer survey.

¹⁷ MHA (Means and Measures of Human Achievement) Labs is a public/private research and development nonprofit that designs products and services for 21st century skills development with a focus on youth. Since 2011, the organization has been developing and refining a work readiness/employability assessment tool.

End of summer supervisor surveys, developed by STEP-UP and CAREI staff, were also administered electronically through SurveyMonkey. Unique links were emailed to supervisors, and reminder emails were sent to increase response rates. The link was not individualized. Results were compiled in Excel through SurveyMonkey and were analyzed in SPSS. These surveys provided data on the experience of supervisors with their interns and with the program and were used for the implementation evaluation.

Of the 513 supervisors from the summer of 2016, 341 (66%) responded to an end-of-summer survey (105 Discover—82%; 236 Achieve—61%).

Demographic data about students, as well as information about training levels and placements, were drawn from the STEP-UP database and provided to the evaluation team by STEP-UP program staff. We also drew on program documents such as handbooks and email correspondence, as well as the program's website.

Prior to the summer of 2016, STEP-UP staff worked with their CAREI evaluators to revamp the baseline survey for assessing employability outcomes. The change was made to accomplish two goals: (1) to use items from an instrument that had been tested extensively and that had the potential to provide data with stronger validity, and (2) to align the tool for measuring this change with a tool that supervisors were using to provide feedback to and about their interns. The materials from MHA Labs were streamlined and further tested prior to the 2016 program season. The staff's intention was to have supervisors focus on the skills with strong correlations to employability, to use the framework of hirability skills to give feedback to interns, and then to measure growth on the pre- and post-internship survey on the same skills. Supervisor orientations devoted time to the hirability framework from MHA Labs, and weekly emails sent by STEP-UP staff addressed its use as well. Data from the end-of-summer surveys of both interns and supervisors indicated that many supervisors did not use the framework.

Data about perceptions were gathered from teens in seven semi-structured group interviews in the spring and summer of 2016. Four were held at two different high schools in late May and early June. Three group interviews were held in July at different work sites. Interview participants were grouped according to their experience with STEP-UP: students who never participated in STEP-UP, students who applied to the program but did not do training, students who did a Discover internship but did not continue into Achieve the following summer, and students who did Achieve internships. The CAREI evaluators worked with staff from AchieveMpls to conceptualize the study, develop data gathering instruments, and analyze data. Achieve staff arranged for and conducted the interviews, led the work on data analysis, and drew conclusions from the study. Interviews lasted approximately 30 minutes and groups ranged in size from 2-9 students. Staff from the high school Career and College Centers assisted with the interviews and took notes in the spring interviews. Staff from AchieveMpls assisted with the

summer interviews and took notes. The interviews were recorded for analysis purposes. The notes and recordings were analyzed to identify themes.

Measurement. The implementation evaluation examined (a) outputs (b) fidelity to program design; (c) program dosage; (d) program quality—including exposure and satisfaction; and (e) perceptions of the program. Figure 1 outlines the sources of data for each of these areas. See Appendix E for specific survey questions used to measure various program components.

OUTPUTS	
Program component	Data source
Training	STEP-UP database
Pipelines/Career Enrichment Activities	STEP-UP database
Internships: Interns	STEP-UP database; baseline survey; end-of-summer intern survey
Internships: Supervisors	STEP-UP database
Internships: Placements	STEP-UP database

FIDELITY OF IMPLEMENTATION	
Program component	Data source
Training	Staff interviews; program website; program documents
Pipelines/Career Enrichment	Staff interviews; program website; program documents
Internships	Staff interviews; program website; program documents

PROGRAM DOSAGE	
Program component	Data source
Training	Program documents
Internships	Program documents
Pipelines/Career Enrichment	Program documents; STEP-UP database

PROGRAM EXPOSURE/SATISFACTION	
Program component	Data source
Training	Post-training survey; end-of-summer intern survey; program documents
Internships	End-of-summer intern survey; end-of-summer supervisor survey; program documents

PERCEPTIONS OF THE PROGRAM	
Program component	Data source

Training	Group interviews conducted by AchieveMpls staff
Internships	Group interviews conducted by AchieveMpls staff

Figure 1: Sources of data for implementation evaluation

Analysis. The following outlines analysis procedures for each of the following parts of the implementation evaluations: (a) outputs (b) fidelity to program design; (c) program dosage; (d) program exposure; (e) participant satisfaction and (f) perceptions of the program.

Outputs. Program outputs were analyzed in SPSS using data drawn from the STEP-UP database.

Fidelity to program design. Current practices were compared to the description of the program in the SEP.

Program dosage. Dosage is defined as the experiences provided to participants by AchieveMpls and the City of Minneapolis. These were training and the assignment of internships for all participants, required career enrichment activities for some participants, and optional career enrichment activities. For the training component of the program, dosage was the same for all participants at each training level and was reported by program staff; number of hours were drawn from program documents. Completing an internship was considered the internship dosage. Since the program did not control the number of hours per week that interns worked nor the number of weeks worked over the course of the summer, they cannot be considered dosage. Dosage for career enrichment activities was determined by counting the number of enrichment activities in which an intern participated that were 20 hours or fewer (if any) and the number of activities interns participated in that were more than 20 hours (if any).

Program quality. Quality of internship was nearly impossible to measure given the vast range of settings and experiences that constituted STEP-UP internships. Using the guidelines and recommendations that program staff provided to supervisors in orientations, handbooks, and emails during the summer, it is possible to infer what staff believe contribute to a high-quality internship. Elements of quality that were examined were exposure and satisfaction.

Exposure. One element that contributes to program quality is exposure. We define exposure as opportunities interns provided to interns at the internship placement. While the STEP-UP program recommended that supervisors provide particular types of opportunities during the summer, program staff had no control over whether they were provided, nor, if provided, the frequency or extent of those opportunities.

Recommended experiences for interns were communicated to supervisors in the orientation, supervisor handbook and weekly emails to supervisors. There is no way to know exactly how much time was devoted to any of these things in any given internship. Using intern and supervisor end-of-summer surveys, we were able to calculate estimates of the extent and or frequency of particular activities and experiences for participants who completed the surveys. The items used a six-point Likert scale, and the categories were collapsed to three—weak (1 or 2 on the Likert scale), moderate (3 or 4 on the Likert scale), and strong (5 or 6 on the Likert scale), and percentages were calculated for each of the three categories on each item. These were the items examined:

- Providing a job description; creating a work plan (expectations and goals)
- Implementing a strategy for supporting the intern (giving clear directions, checking in regularly and reflecting on the experience together, talking to them about future plans, helping them develop professional skills, talking to them about the company and its activities, talking about their own education and work history)
- Establishing a project for the intern to undertake
- Providing a mentor (either the supervisor or another adult)
- Giving regular feedback to the intern (including a mid-internship check-in and a performance evaluation)
- Opportunities to learn about a career in the specific fields through activities such as job shadow, attending meetings, informational interviews
- Developing networks (e.g., lunch with supervisor, attending social gatherings with colleagues, meeting the president or CEO, attending meetings)
- Specialized training (e.g., Excel, Outlook)

Comparisons were made between supervisor and intern responses about the same activities.

In the supervisor end-of-summer survey, respondents estimated the amount of time they spent in a typical week on a range of activities with their intern using a response scale from not at all to more than two hours. The eight categories were collapsed to three (not at all, 15-45 minutes, and 1 hour or more) and percentages of responses were calculated for each of the three categories for each item.

Participant satisfaction. Another element of program quality is satisfaction of participants—both interns and supervisors. We looked at satisfaction with training and with internships.

Training. Responses to the Likert-scale and multiple-choice items on the post-training survey were tallied and percentages calculated using Excel for each response option (Strongly Disagree/Disagree/Agree/Strongly Agree).

Internships. Survey questions with Likert scale and multiple-choice responses were tallied and percentages calculated in SPSS. Responses to open-ended questions were coded to identify patterns and themes.

Perceptions of the program. The interviews were recorded for analysis purposes. Using a coding system, the notes and recordings were analyzed to identify themes. See Appendix F for more on information on the perceptions study.

Study Logistics

The study proceeded as planned. There were no issues or changes to the timeline or budget. There were no changes to evaluation personnel at CAREI. The research/evaluation staff position at AchieveMpls changed over the period of the grant; five different people held the position. Those changes did not affect the conduct of the study. There were no problems with the IRB.

Method: Impact Evaluation

Impact Evaluation Questions: Confirmatory

1. Does the STEP-UP summer jobs program improve school outcomes?
 - a. Do the Achieve participants achieve better school outcomes than comparison group students?
 - b. Do the Discover participants achieve better school outcomes than comparison group students?
 - c. Do STEP-UP participants have a higher postsecondary enrollment than the comparison group?

Impact Evaluation Questions: Exploratory

2. Does the STEP-UP summer jobs program improve school outcomes?
 - a. Do the Achieve participants achieve better school outcomes pre- to post-program?
 - b. Do the Discover students achieve better school outcomes pre- to post-program?
2. Does the STEP-UP summer jobs program improve employability outcomes?
 - a. Do the Achieve participants achieve better employability outcomes pre- to post-program?
 - b. Do the Discover participants achieve better employability outcomes pre- to post-program?

4. Do differential experiences in the STEP-UP summer job program – internship quality, length, longitudinal experience, and/or additional training – lead to differential outcomes on school and employability measures?
 - a. Do students with higher quality internship experiences have better outcomes?
 - b. Do students who work longer work weeks and/or more weeks in the program have better outcomes?
 - c. Do students who work for STEP-UP multiple years in a row and/or during the summer and school year have better outcomes?
 - d. Do students who received additional training, support services and/or certifications have better outcomes than those students who do not?

Impact Modifications to SIF Subgrantee Evaluation Plan (SEP) Adjustments were made in the questions proposed in the original SEP approved in 2013. These modifications were submitted in July, 2016, returned with a request for further information, and resubmitted September 12, 2016. They were approved September 21, 2016. One confirmatory impact question was omitted. It asked about “Fast Track” program participants; the question was removed because the program was discontinued. Several exploratory impact questions related to the Fast Track program were also removed.

One confirmatory impact question about postsecondary enrollment was added. While originally intended to be included given the program’s theory of change and logic model, the question was removed because of the timeframe of the study and data availability. Because the study’s timeline was extended, and because the data became available, the question could be added to the evaluation. The postsecondary outcome of program enrollment is examined below. Other postsecondary outcomes mentioned in the original SEP (college persistence, obtaining a secondary degree, job placement, and income) are not explored since they will only be measurable and/or accessible after the period of the SIF subgrant has concluded.

When conducting the analysis for the final report, it became clear that there were not data available to answer some of the exploratory impact sub-questions listed in the SEP about differential experiences and whether they lead to differential outcomes. The questions that were addressed were about students who worked more weeks or longer weeks and about students who participated in STEP-UP multiple years. Since we were unable to develop a measure of quality, it was not possible to examine outcomes for interns in internships of differing quality.

Impact Study Design

First design: A quasi-experimental between-groups design with matched comparison groups based on propensity score matching. To address the confirmatory

questions: “Do STEP-UP participants achieve better school outcomes than comparison group students?” and “Do STEP-UP participants have a higher postsecondary enrollment than the comparison group?” a quasi-experimental between-groups design with matched comparison groups from non-STEP-UP Minneapolis Public School (MPS) middle school and high school students was used to study the program’s impact on school outcomes. A comparison group was formed based on propensity score matching.

The Research, Evaluation, Assessment, and Accountability staff at Minneapolis Public Schools also conducted an internal exploratory analysis of STEP-UP participants and matched comparison groups on data related to social-emotional learning, one of the targeted outcomes included in the SEP. These analyses looked at participants and their matches for 2014, 2015, and 2016.

Rationale. With the quasi-experimental design with matched comparison groups, the study sought to reach a moderate level of program outcome evidence. Random assignment of applicants to program or control groups was not feasible for this evaluation. Briefly, more youth apply than AchieveMpls has the capacity to train; only about half the applicants complete training; in the end, the available internships can only accommodate about three-quarters of those who complete training; those slots –1,389 in 2016– are filled by a most-qualified and best-fit selection process. This process of applying for and matching students to internships prevents the use of random assignment.

Design. Four hundred ninety-seven (497) STEP-UP interns¹⁸ in the summer of 2016 were matched with 339 similar non-STEP-UP Minneapolis Public School students to study the program’s effectiveness on educational outcomes. The group of interns was compared with the group of matched MPS students on school outcomes (see below). The SEP anticipated a higher number of participants and matched students¹⁹. In order to be included in the analysis, participants had to be enrolled in Minneapolis Public schools for at least 75% of the year for two consecutive years, both before and after the internship, and they had to have completed a STEP-UP internship. Using those criteria reduced the total number of students to match. There is adequate power for analyses that includes 497 participants and 339 matched students. The reduced numbers do impact the external validity of the analyses. It is possible that students who did not attend Minneapolis Public Schools or did not complete an internship were different from those included in our analyses.

Threats to internal validity. The quasi-experimental design with matched comparison

¹⁸ This is out of 1,272 students who completed an internship in 2016.

¹⁹ The original estimate was 800 program participants and 800 matched students.

groups using propensity score matching techniques enables the formation of matched groups that have balance on a set of observed covariates (Stuart & Rubin, 2007). The covariate distributions in the program and comparison groups are only randomly different from each other in respect to the included covariates. Conceptually, this approach replicates a randomized experiment where study participants are balanced on characteristics across groups. There are potential limitations with this design. The most common limitation is the omission of important covariates that can lead to bias in statistical comparisons (Fan & Nowell, 2011). Although the evaluation team and AchieveMpls identified key covariates that predict the likelihood of students receiving their services, there may have been hidden covariates that should have been considered. For example, the internal threat of history to validity could be a potential problem. We know that STEP-UP interns are receiving support services and are working at their job placements. We were not able to determine other interventions that students in our comparison groups may have been receiving. In addition, the propensity score model did not include prior academic achievement.

Propensity score matching. The goal of our matching strategy was to select comparative groups that are as similar as possible to STEP-UP interns. To reduce selection bias and enhance internal validity of the design, propensity score matching was used to improve group equivalence or comparability (Song & Herman, 2009).

Covariates. The first step in propensity score matching is to determine the best covariates to generate propensity scores (Fan & Nowell, 2011). Literature on propensity score matching procedures recommends that corresponding variables include preexisting characteristics that are strongly related to the outcome variable(s) (Song & Herman, 2009; Stuart & Rubin, 2007). Relevant variables related to school performance outcomes include pre-assessment measures, demographics, socioeconomic status, family background, and geographical location (Barth, Guo, & McCrae, 2008; Fan & Nowell, 2011).

The evaluation team worked closely with AchieveMpls to identify key covariates that would best represent characteristics of the program's students. Additionally, the variables were thought to influence academic outcomes. The covariates and rationales for including them were:

- **Socioeconomic status** (Free or reduced-price lunch status). An indicator of living below federal poverty guidelines for school children is receiving free or reduced-price lunch through the National School Lunch Program. Eligibility is based on household size and family income. Interns were compared to students with similar free or reduced lunch status.
- **Ethnicity.** STEP-UP interns come from diverse backgrounds, including African American, ethnic Africans, Asian, Latino, Native American and white. Matching techniques equated youth with similar ethnicity backgrounds.

- **Primary language** (English language learner status). Similar to ethnicity, primary language reflects cultural background and the language most often used in homes. English is a secondary language for some program interns. Since school performance measures were completed in English, students were matched in both groups on primary language.
- **Gender.** To accommodate any differences between groups on gender, this variable was included in the matching procedures.
- **Grade Level.** Although interns vary somewhat on age across grade level, this variable prevented the matching of a 14-year-old STEP-UP intern with an 18-year-old non-STEP-UP MPS student.
- **Special education status.** Special education status may influence academic progress and, therefore, was included in the matching procedure. We wanted to know if interns and potential MPS student matches had active Individualized Educational Plans (IEPs) or 504 plans and were receiving specialized instruction and related services sometimes in restrictive environments outside the regular classroom. Special education status has implications for the AchieveMpls training and internships as well school performance.

Propensity score matching procedures. AchieveMpls and the evaluation team worked with Minneapolis Public Schools to obtain (matched) samples of students and their covariate and outcome data. Data for each student was associated with a unique identifier (MARSS) number used by the MPS database to track all MPS students. Measures were taken to ensure there was no overlap between the two groups. Staff of the Minneapolis Public Schools Department of Research, Evaluation, Assessment and Accountability conducted logit score matching with a nearest-neighbor 1-to-1 ratio with replacement method. A separate model was run for each group by grade-level: Grade 10 Discover, Grade 11 Discover, Grade 10 Achieve, Grade 11 Achieve and Grade 12 Achieve. The same approach to matching was also used for the SEL study conducted by MPS and provided to CAREI. Variables used for the match were socio-economic status (using free or reduced-price lunch eligibility), ethnicity, primary language, grade level, gender and special education status. In four of the five models, baseline equivalence was obtained for each of the covariates for students and their matches after matching. One of the models (Model 3) did not reach complete equivalence on the variables of gender and one of the home languages. For details about the distribution of propensity scores in the treatment and comparison groups, the proportion of cases matched, and the standardized mean differences in the baseline characteristics between treatment and comparison groups, please see Appendix G. The models did not include variables representing prior academic achievement, and therefore we did not know if there was baseline equivalence between interns and matched students on the outcome variables in the year prior to the program. Therefore, we refit our models to control for prior achievement in the assessment of outcomes in the school year following the program. The results did not change when controlling for prior achievement.

Second design: A quasi-experimental one-group pretest-posttest within participants design. To address the confirmatory questions, “Do the Achieve participants achieve better school outcomes pre- to post-program?” and “Do the Discover students achieve better school outcomes pre- to post-program?” a quasi-experimental one-group pretest-posttest within participants design was used (Shadish, Cook & Campbell, 2002). The same design was used to address the exploratory questions, “Do the Achieve participants achieve better employability outcomes pre- to post-program?” and “Do the Discover participants achieve better employability outcomes pre- to post-program?”

Rationale. With a quasi-experimental one-group pretest-posttest within participants design, AchieveMpls sought preliminary program outcome evidence on pre- to post-program specific gains on school and employability outcomes for MPS STEP-UP interns.

Design. Approximately 330 (53% of Achieve interns who completed an internship) STEP-UP Achieve interns and 362 (55% of Discover interns who completed an internship) STEP-UP Discover interns were compared with themselves pre- to post-program on school outcomes. In this design, pre-program data stand in for the comparison group or control mechanism. School outcomes are data collected by MPS. Pre-program were the data collected through the school year completed before the 2016 summer internships, during school year 2015-16 (SY16). Post-program were the data collected through the following school year, 2016-17 (SY17). The students in the analysis are students for whom we had data from both school years.²⁰ School outcomes included improved academic outcomes—GPA; attendance; behavior (referrals, removals, suspensions); graduation rates; and on-track to graduate.

Employability outcomes were data collected by the STEP-UP program. Pre-program data were collected before training and internship placement. Post-program data were collected during the exit phase of the summer internships (from mid-August through September) and included attitude, occupational or professional knowledge, future orientation, 21st Century skills such as teamwork and communication, and professional networks. 320 Achieve and 360 Discover interns were compared with themselves pre- to post-program on employability outcomes. These were the interns who completed an internship and who completed both the pre- and post-program survey.

²⁰ We have school outcome data only for Minneapolis Public School (MPS) students. If students did not attend MPS or attended only in SY15 or SY16 we could not include them in the analysis. The number of students for whom we had both years of school outcome data available was lower than anticipated in the SEP, approved in 2014. The SEP expected the comparison of 750 STEP-UP Achieve interns and 650 STEP-UP Discover interns.

Threats to internal validity. There were few or no threats to internal validity from maturation or history since this was within subjects, although history effects may have occurred if some of the participants received concurrent and subsequent school-year additional outside interventions. The major threats to internal validity for the one group pretest-posttest within participants design (both school outcomes and employability) were instrumentation, testing effects, missing data, and attrition (Shadish, Cook & Campbell, 2002). As with the quasi-experimental between subjects matched comparison design, external validity here is minimal.

Evidence. The program evaluation of STEP-UP was designed to provide a moderate level of evidence. The quasi-experimental propensity score matching design provided a rigorous approach and allowed the study to consider evidence of causality. As mentioned earlier, randomization of students to program or control groups was not possible for this study. With the second design, the intent was to provide preliminary program outcome evidence on pre- to post-program specific gains on school outcomes for STEP-UP interns.

Prior to this evaluation, the evidence for STEP-UP's efficacy was at a preliminary level. One study conducted by University of Minnesota researchers used propensity score matching to examine academic outcomes of STEP-UP students (Maruyama, VanBoekel and Cobie, 2013). They reported that the STEP-UP program had a marginally significant impact on standardized test scores in certain sub-groups but did not have an impact on behavior or attendance. This study used only MPS students, which account for about 60 percent of the STEP-UP students. The study also did not look at more distal outcomes such as graduation rates, postsecondary outcomes, or workforce outcomes.

Additional Exploratory Questions: Differential Experiences. We addressed the exploratory questions about different experiences (more than one summer as an intern, longer internships) by analyzing the relationship between students with different experiences in relationship to school and employability outcomes. Because Discover interns worked a standardized number of hours per week and weeks per summer, we looked at length of internship differences (hours and weeks) only for Achieve interns.

Participant Flow Description

Sample size. In the summer of 2016, 1,272 youth completed a STEP-UP internship, 617 Achieve and 655 Discover.

Of the 1,272, 664 were students in Minneapolis Public Schools in 2016-17 (the summer following the internship). In order to have adequate data and meaningful analyses, we examined only those who were enrolled at least 75% of the school years prior to and following the

internship. This criterion for inclusion yielded 270 Achieve students and 227 Discover students in the analysis of the treatment group.

Using the same criterion for inclusion, enrolled at least 75% of the school years prior to and following the summer of 2016, the match yielded 186 matches for the Achieve participants and 153 matches for the Discover participants.

Employability analyses included 696 interns—those for whom we had pre-program and post-program data. Nearly all interns completed the pre-program survey, but a smaller number of interns completed the post-program survey. Of those for whom we have pre- and post-program data, 333 were Achieve interns and 363 were Discover interns.

In the exploratory analysis comparing outcomes for interns who worked different numbers of weeks and hours per week, we had data on 154 Achieve interns. In the exploratory analysis comparing outcomes for interns who were in the program more than one summer, we had data for 420 interns.

Demographics of the sample. Table 1 presents the demographics for all students who completed a STEP-UP internship in 2016, in 2016, as well as the subset of interns included in the study and their matched students. The final sample for the study included interns and matches who were enrolled in Minneapolis Public Schools at least 75% of the school year in 2015-16 and 2016-17. While there are some differences in the demographic data for those enrolled 75% of both years, the patterns are the same in the reduced sample as in the larger group for whom we have data. The patterns are similar to all Achieve and Discover interns who completed the program in 2016.

In terms of gender, there were more females than males. The largest racial group was African Americans. Around 4/5 of the sample was eligible for free and reduced lunch. A very small percentage of the sample was homeless or highly mobile. In the Achieve sample, about 20% were special education students; in the Discover sample there were about 14% special education students. The home language of the majority of Discover students and matches (60%) was English; for Achieve that was the case for about 45%. The next most commonly spoken home language was Somali.

Table 1

Demographics for Interns and Matched Students

		All Interns^	All Achieve Interns^	Achieve MPS All Data*	Achieve MPS Sample**	Achieve Matched All Data#	Achieve Matched Sample##	All Discover Interns^	Discover MPS All Data*	Discover MPS Sample**	Discover Matched All Data#	Discover Matched Sample##
GENDER	Male	43% (552)	42% (260)		47% (127)			45% (292)		48% (108)		
	Female	57% (720)	58% (357)		53% (143)			55% (363)		52% (119)		
RACE/ETHNICITY	African American	62% (795)	60% (372)	62% (174)	60% (163)	55% (144)	51% (95)	65% (426)	60% (146)	60% (135)	55% (126)	50% (77)
	Native American	6% (73)	4% (27)	2% (6)	2% (6)	5% (13)	3% (6)	7% (46)	4% (10)	4% (10)	6% (14)	7% (10)
	Asian	11% (145)	13% (81)	15% (42)	15% (41)	17% (44)	17% (32)	10% (64)	15% (37)	16% (36)	12% (28)	14% (21)
	Hispanic	9% (110)	10% (60)	11% (31)	12% (31)	13% (35)	17% (31)	8% (50)	11% (26)	10% (23)	16% (36)	20% (30)
	Caucasian	6% (78)	8% (47)	10% (29)	11% (29)	10% (27)	12% (22)	5% (31)	11% (26)	10% (23)	11% (25)	10% (15)
	Missing or Other	6% (71)	5% (30)					6% (38)				
FRL	Yes	81% (1,082)	78% (482)	80% (226)	79% (214)	80% (21)	76% (142)	83% (546)	80% (196)	79% (180)	82% (187)	80% (123)
	No	9% (114)	9% (57)	20% (56)	21% (56)	20% (53)	24% (44)	9% (57)	20% (49)	21% (47)	18% (42)	20% (30)
	n/a or missing	10% (129)	13% (77)					8% (52)				
HOMELESS	Yes	3% (42)	2% (15)	.4% (1)	.4% (1)	.4% (1)	.5% (1)	4% (27)	0	0	0	0
	No	97% (1,230)	98% (602)	99.6% (281)	99.6% (269)	99.6% (262)	99.5% (185)	96% (628)	100% (245)	100% (227)	100% (229)	100% (153)
SPECIAL ED	Yes	14% (172)	15% (90)	20% (56)	20% (54)	19% (49)	20% (38)	12.5% (82)	13.5% (33)	14% (31)	13% (33)	14% (22)
	No	86% (1,100)	85% (527)	80% (226)	80% (216)	81% (214)	80% (148)	87.5% (573)	86.5% (212)	86% (196)	87% (196)	86% (131)

		All Interns [^]	All Achieve Interns [^]	Achieve MPS All Data*	Achieve MPS Sample**	Achieve Matched All Data#	Achieve Matched Sample##	All Discover Interns [^]	Discover MPS All Data*	Discover MPS Sample**	Discover Matched All Data#	Discover Matched Sample##
HOME LANG	English			44% (125)	44% (119)	46% (122)	46% (85)		61% (149)	60% (135)	63% (144)	60% (92)
	Hmong			13% (36)	13% (35)	11% (29)	12% (23)		11% (27)	12% (26)	9% (21)	9% (14)
	Somali			24% (67)	23% (63)	24% (63)	22% (40)		16% (38)	16% (37)	15% (34)	15% (23)
	Spanish			10% (29)	11% (29)	10% (26)	12% (22)		9% (22)	9% (20)	10% (22)	12% (18)
	Other/ Unknown			9% (25)	9% (24)	9% (23)	9% (16)		4% (9)	4% (9)	4% (8)	4% (6)

[^]Data drawn from STEP-UP database

*All interns from 2016 for whom MPS supplied data

**Interns who were enrolled at least 75% of both SY16 and SY17 for whom we had data on school outcomes

#All matched students for whom MPS supplied data

##Matched students who were enrolled at least 75% of both SY16 and SY17

Changes to the sample in SEP. The SEP anticipated approximately 750 Achieve and 650 Discover interns for the study, with approximately the same number of matched students. Because not all program participants were enrolled in the Minneapolis Public Schools, we were able to get school outcome data on a smaller number of students (numbers indicated above).

Sample recruitment and retention. For the treatment group, 3,447 students applied to the program and were eligible for training. Of those, 2,036 students completed work readiness training. Of those, 1,389 were placed in internships and 1,272 completed internships. From the students who completed internships, we examined students who were enrolled in Minneapolis Public Schools at least 75% of the school years 2015-16 (prior to the internship) and 2016-17 (following the internship). See above for final sample size.

Overall and differential attrition. The initial data set from Minneapolis Public Schools yielded 664 students in the treatment group and 492 matches. After examining the dataset, we recognized that both in the treatment group and the matched group there were students who were enrolled both years or who were enrolled only for a limited number of days in one or both years. All variables were examined descriptively for differences between the sample when all students were included versus when only students enrolled for at least 75% of days in both SY16 and SY17 were included. The results indicated no difference between the two samples. We therefore made the decision to include in our sample only students who had been enrolled for 75% of both years. This criterion for inclusion yielded 497 students in the treatment group (a reduction of 25%) and 339 students in the matched group (a reduction of 31%). For Achieve, the number of treatment students went from 410 to 270 (a reduction of 34%) and matched students went from 263 to 186 (a reduction of 29%). For Discover, the number of treatment students went from 254 to 227 (a reduction of 11%) and matched students went from 229 to 153 (a reduction of 33%). We also ran each analysis on outcomes (GPA, attendance, behavior, test scores) with the full sample and with the restricted sample to see if there were differences between the full group and those enrolled 75% of the year using *t*-tests and Chi-square tests. Results regarding program effects were the same.

In looking at differential experiences (more hours/weeks worked, more than one year in the program), we had data for 154 Achieve interns on hours and weeks.²¹ There were data on fewer students on ACT and MCA tests because not all interns took the exams; the tests are administered only to single grade level cohorts each year. For the ACT analysis there were data on 63 interns. For Minnesota Comprehensive Assessment (MCA) Match there were data on 18 interns.

²¹ To be included in the analyses on hours and weeks worked, interns needed to have been MPS students and to have completed end-of-summer surveys.

For conducting the comparisons of interns with more than one year in the program to ones who participated in the summer of 2016 only, we had data for 420 interns, 234 Achieve (137 with one year of experience, 97 with more than one) and 186 Discover (153 with one year of experience, 33 with more than one).

For the analyses of post-secondary enrollment, we had data only for the cohorts who participated in the program in the summers of 2014 and 2015. While most of this report presents an analysis of the 2016 cohort, we are not able to report on their post-secondary enrollment at this time. For the 2014 cohort, we had data on 450 students, 128 participants and 322 comparison students.²² We examined students who were in 11th and 12th grades the summer following the internship. For the 2015 cohort, we had data on 117 participants and 94 comparison students. We examined students who were in 12th grade the summer following the internship.

Non-response bias and missing data. Descriptive statistics were generated and compared for the full data set of treatment and matched students and for those enrolled in Minneapolis Public Schools at least 75% of the year in both 2015-16 (SY16) and 2016-17 (SY17). An examination of the data indicated no differences between the two samples, and the results are presented for students enrolled 75% or more of both years.

In cases where data was missing or we found data entry mistakes for a particular outcome (either school or employability), we removed those cases from the analysis of that outcome only.

Results of assessment and adjustment for potential biases due to non-consent and data non-response. There were no issues of non-consent. In cases with non-response, we eliminated cases on an outcome-by-outcome basis.

Statistical procedures used to adjust for missing data. In cases where there was missing outcome data we used list-wise deletion for each outcome separately.

Data Collection & Measurement: Impact

First design (between-groups): measures/instruments. Outcome measures used for the first design were the following school outcomes: GPA (grade point average), ACT test scores²³, Minnesota Comprehensive Assessment (MCA) scores²⁴, attendance, behavior (referrals,

²² The propensity score match in 2014 drew 3 matches for every participant.

²³ The ACT is a college admissions test, used to assess academic readiness for college. It is administered to eleventh graders in Minneapolis Public Schools.

²⁴ The Minnesota Comprehensive Assessments (MCA) are the state tests that help districts measure student progress toward Minnesota's academic standards and also meet federal and state legislative requirements. Reading is given in tenth grade and math in eleventh.

removals, and suspensions²⁵), graduation rates, and being on-target for graduation. The post-secondary outcome measure used was whether students had ever enrolled in a post-secondary program (certificate or degree-bearing).

The social-emotional outcome measure used was academic persistence, selected because it is a measure for which MPS collects data from all students every year.²⁶ Data about social-emotional learning was drawn from an academic persistence survey, developed by REAA.²⁷

First design (between-groups): data collection. STEP-UP provided demographic data on interns from their database to the evaluators. The Department of Research, Evaluation, Assessment and Accountability (REAA) of the Minneapolis Public Schools provided de-identified school outcome data to the evaluators. These data are collected regularly by the department for all Minneapolis Public School students and were provided to CAREI evaluators through a data-sharing agreement established with Greater Twin Cities United Way for this evaluation. Data for 2016 participants and matched students were gathered throughout the 2015-16 and 2016-17 school years and were shared through a secured file sharing system.

STEP-UP program staff trained to use the STEP-UP database, in consultation with CAREI evaluators, provided a list of internship completers to REAA following the summer of 2016.

²⁵ A suspension is when a student is sent home and misses more than one day of school. A removal is when a student is removed from the classroom for a specified period of time or is sent home for a day or less. A referral is any other type of administrative response that is not either a suspension or a removal.

²⁶ Academic persistence can best be defined as ongoing task engagement even in the face of difficulties and failures (Guan, Kiang, McBride & Bruene, 2006). Persistence in academics is represented by continued task engagement even when confronted with failures (Guan, Xiang, McBride & Bruene, 2006). The study of academic persistence has a rich history where academic persistence has been shown to be related to GPA, adoption of mastery goals, school completion and retention in higher education (Bordes-Edgar, Arredondo, Robinson Kurpius & Rund, 2011; Elliot, McGregor & Gable, 1999).

Minneapolis Public Schools defines persistence as refusal to give up in spite of difficulty. Persistence can also be thought of as a measure of a student's desire to beat-the-odds. Persistence pushes students to meet long-term goals, stay motivated.

²⁷ This tool includes 10 items measuring students' refusal to give up in spite of difficulty. Items are answered on a five-point scale, ranging from *not like me* (1) to *always like me* (5). Sample items include: "If I am stuck on something, I will not stop until I find a solution," "I do high-quality work in school all year long," and "I like to do things that are challenging." Factor analyses found evidence that all ten persistence items loaded on to a single factor. The scale had good internal consistency reliability (as measured by coefficient alpha; $\alpha_{2015} = .93$, $\alpha_{2016} = .94$, and $\alpha_{2017} = .94$) indicating that students were responding consistently to these items.

REAA drew the Minneapolis Public School students from this list both to generate the match and to furnish school-related data for the school years prior to and following the internship summer. School outcome and demographic data on both the students who completed their internship and matches were provided to CAREI by REAA through a secure file-sharing system and were de-identified. These data were stored in a password-protected system at the University of MN. For participants, data from the STEP-UP data base were merged with files on demographics and school outcomes provided by MPS. Separate files were created for interns and matched students who were enrolled in MPS at least 75% of both SY16 and SY17.

Data on post-secondary enrollment were provided by SLEDS (Minnesota Statewide Longitudinal Educational Data System).²⁸ CAREI, in collaboration with Minneapolis Public Schools and AchieveMpls, submitted an application for data access. De-identified data for all Minneapolis Public School students were provided by SLEDS to CAREI. SLEDS provided a key to the data to MPS so they could re-identify the files of students in the study. The researcher at CAREI then merged the post-secondary outcome data with other data on interns and matched students.

In order to conduct the analyses on behavior, several new variables were created.

- Total number of removals was calculated by adding out-of-school removals and in-school removals
- For referrals, a binary variable was created (Yes/No) if a student had any referrals (regardless of number). The same was done for removals and suspensions. The new variables were used to perform Chi-square analyses.

In order to conduct analyses on differential experiences, several new variables were created.

- For number of weeks worked, students were assigned a grouping variable based on the number they indicated on their end-of-summer survey
- For number of hours worked per week, students were assigned a grouping variable based on the range they indicated on their end-of-summer survey
- For multiple year participation, a new variable indicated whether students completed an internship in STEP-UP only in 2016 or if they did so in 2016 PLUS either 2014 or 2015.

²⁸ SLEDS matches student data from pre-kindergarten through completion of postsecondary education and into the workforce to identify pathways for individuals in achieving successful outcomes in education and work; to inform decisions to support and improve education and workforce policy and practice, and to assist in creating a more seamless education and workforce system for all Minnesotans. The Minnesota P-20 Education Partnership governs the SLEDS system. The project is managed jointly by the Minnesota Office of Higher Education (OHE) (opens new window), Minnesota Departments of Education (MDE), and Employment and Economic Development (DEED).

The academic persistence survey was administered to MPS students for three consecutive school years: 2014-2015 (10,896 students), 2015-2016 (11,458 students), and 2016-2017 (11,002 students).

Second design (within-participants) school outcomes: measures/instruments.

Achieve and Discover interns were compared with themselves pre- to post-program on these school outcomes: GPA, attendance, and behavior (referrals, removals, and suspensions). Because students do not take the same standardized test every year, test scores were not an outcome measure used in the second design.

Second design (within-participants) school outcomes: data collection. Pre-program school measures were the data collected through the school year completed before the internships in the summer of 2016, that is SY15 (2015-16). Conceptually, pre-program data stood in for a comparison group or control group. Post-program were the data collected through the following school year, that is SY17 (2016-17). As indicated above, data were provided by Minneapolis Public Schools Department of Research, Evaluation, Assessment and Accountability from their student database to the evaluation team. The same procedures described above were used to insure data security and for data storage.

Second design (within-participants) employability outcomes: measures/instruments.

Employability outcomes were measured using a survey in which students rated themselves on a five-point agree/disagree scale prior to training and again at the end of the internship on 25 items. See Appendix H for a copy of the instrument.

In the original SEP, the plan was to develop an instrument in-house to measure employability outcomes. CAREI developed the survey, drawing on literature, tested instruments, and STEP-UP's previously used survey. It was used in the summers of 2014 and 2015. Students rated themselves prior to training and again at the end of the internship on items related to attitude, work related skills, future orientation, occupational knowledge, 21st Century skills such as conflict resolution, teamwork, and professional networks. Because of its use of a four-point response scale, the nature of the questions, the students' tendency to rate themselves highly, and the difficulty to establish the reliability and validity of the instrument, it was difficult to use it to measure change over time.

A new student survey on employability skills, based on one developed by MHA Labs, was used in the summers of 2016 and 2017.²⁹ MHA Labs³⁰ statistical analysis³¹ focuses on how well skill survey items predict a youth's Hirability Status. Hirability Status is the average of 3 items:

- If I had a job opening, I would hire this person
- I would recommend this person to a colleague, for a similar position
- I would seek out this person to be on my next project.

Because the items in the MHA Labs instrument were intended to be used by employers to rate workers, some of the items needed to be adapted for a youth survey. Some of the items for the STEP-UP survey were taken directly from the MHA tool and others were reworded. Some items were carried over from a tool developed by CAREI and Achieve staff and used in 2014 and 2015. Validation studies were not conducted on the instrument. Many items were drawn from the MHA instrument on which validation studies were conducted.

Second Design (Within-participants) Employability Outcomes: Data Collection. For employability outcomes, the pre-internship data were collected using a paper and pencil survey distributed by trainers on the first day of training in spring 2016. Results were compiled electronically using InspiroScan, compiled in Excel, and analyzed in SPSS. The same questions were included in a longer end of summer instrument administered online through

²⁹ The staff's intention was to have supervisors focus on the skills with strong correlations to employability, to use the framework of hirability skills to give feedback to interns, and then to measure growth on the pre- and post-internship survey on the same skills. Supervisor orientations devoted time to the hirability framework from MHA Labs and weekly emails addressed its use as well.

³⁰ MHA (Means and Measures of Human Achievement) Labs is a public/private research and development nonprofit that designs products and services for 21st century skills development with a focus on youth. Since 2011, the organization has been developing and refining a work readiness/employability assessment tool.

³¹ By calculating the R Squared values for each survey, MHA Labs was able to identify the fraction of the Hirability Status that can be explained by adding together the contributions of (in this case) all the skill-related survey items from a given survey. R Squared was obtained through multiple linear regression. MHA Labs additionally adjusted for the length of the survey. Skills survey research was conducted over a 7 years period beginning with a 4,000item skill research database. MHA Labs collaborated with research analysts, subject matter experts and practitioners to isolate and test 102 different items on 6 unique employer survey designs with a total of 8950 summer job employer surveys. The survey is a performance review of an individual youth employee.

The 2015 version tested 40 items with an N of 2,353 and an R Squared Adjusted value of 0.73. With the goal to further shorten the tool, only 12 items with the highest R Squared value comprised the 2016 survey. This version with only 12 items had an N of 3496 and an R Squared Adjusted value of 0.83.

SurveyMonkey. Each intern received a unique link to the survey in order to identify results. Staff at AchieveMpls and the City of Minneapolis emailed the surveys to all interns in August prior to the end of the internship and to supervisors to provide time at work for the interns to complete the surveys. Staff at Achieve and the City followed up by text message throughout September to increase the response rate. Results were compiled in Excel through SurveyMonkey and analyzed in SPSS.

Pre-internship data were available from 1,084 interns who completed internships. Even with these efforts, post-internship data were available from 828 interns, a response rate of 65%. The analysis examined interns for whom we had both a pre- and a post survey (approximately 330 Achieve interns and 360 Discover interns; there was variation across items). The data included in this analysis included both MPS students and student enrolled in other school districts.

Analysis

First design: quasi-experimental between-groups design with matched comparison groups based on propensity score matching. The unit of analysis in all analyses was the individual student. The independent variable for the analyses was STEP-UP internship participation versus non-participation. This was a fixed effect. The dependent variables were school outcomes: GPA, attendance, ACT test scores, MCA scores, behavior records (referrals, removals, and suspensions), being on track to graduate, and graduation rates. The dependent variable for post-secondary enrollment was whether students had ever enrolled in a post-secondary program (certificate or degree-bearing).

First, we calculated descriptive statistics for the STEP-UP interns who were enrolled in MPS in 2015-16, completed internships in Summer 2016, and were again enrolled in MPS in 2016-17 as well as the comparison groups.

We used independent *t* tests, Mann-Whitney U, chi-square, ANCOVA, and logistic regression analyses to determine if there were significant differences on school outcome measures and post-secondary enrollment between STEP-UP interns and the comparison non-STEP-UP students. Where possible we controlled for SY16 outcome measures when looking at the differences between participants and non-participants on SY17 outcome measures. Tests were selected on the basis of the scale of the outcome variable or on modeling assumptions.

For all of the analyses, Discover and Achieve students were examined as separate groups. In order to do so, the matched students were selected by age.

With some outcome variables, there were limited numbers of cases to analyze. Standardized tests

were only given at a single grade level. With regard to behavior outcomes (referrals, removals, suspensions), many students were never referred, removed, or suspended. Graduation rates could only be examined for students who were in 11th grade in SY16. In all analyses we present descriptive statistics, and where numbers of cases in the analysis allow³², we also report on statistically significant differences and effect sizes.

The postsecondary analysis was conducted only for the 2014 and 2015 cohorts since there were not postsecondary data available for the 2016 cohort.

SEL study analysis. Independent-samples *t* tests were conducted to determine how STEP-UP students' level of academic persistence compared to that of a matched comparison sample. The matched comparison samples were created using propensity score matching (PSM). Across all three cohorts, participants were matched within grade and on several characteristics: race/ethnicity, gender, English language services, home language, special education status, homeless/highly mobile status, free/reduced price lunch eligibility, and school. In the 2015 and 2016 samples, participants were also matched within STEP-UP Achieve and Discover groups. Each PSM matched with replacement and utilized the nearest neighbor matching method.

Independent-samples *t* tests were conducted within each of the three cohorts, with participation in STEP-UP serving as the independent variable and academic persistence serving as the dependent variable. Many participants were missing persistence data: 1,916 in the 2014 cohort (426 STEP UP, 1,490 non); 347 in the 2015 cohort (183 STEP UP, 164 non); and 426 in the 2016 cohort (187 STEP UP, 239 non). *T* tests were conducted within group (i.e., Achieve/Discover) for the 2015 and 2016 cohorts – Achieve/Discover group data were not available for the 2014- cohort – for a total of five *t* tests.

Second design: quasi-experimental one-group pretest-posttest within participants design. The unit of analysis in all analyses was the individual intern. The independent variable for the analyses was time of data collection, namely, pre- or post-program. This is a fixed effect. The dependent variables were school and employability outcomes.

School outcomes. First, we calculated descriptive statistics for the STEP-UP interns on the school measures pre-program and post-program who were enrolled for at least 75% of the year in MPS in 2015-16, completed internships in Summer 2016, and were again enrolled in MPS for at least 75% of the year in 2016-17. There were 497 students who met these criteria, 270 Achieve interns and 227 Discover interns.

³² In analyses with thirty or fewer cases, we have low power to detect anything but a large effect size and we are expecting small to moderate effects at most based on the previous year's evaluation.

These statistics included means and standard deviations. We used paired sample *t* tests (with appropriate effect sizes), McNemar's test, and chi-square tests to determine if there were significant differences on school outcome measures before and after participation in the program. We analyzed the pre- versus post-program differences of the STEP-UP Achieve interns and the STEP-UP Discover interns for each dependent variable for school measures.

With some outcome variables, there were limited numbers of cases to analyze. With regard to behavior outcomes (referrals, removals, suspensions), many students were never referred, removed, or suspended. We were unable to examine ACT or MCA test scores in the within-subject analyses because students took these exams once, not year after year.

It is important to note certain limitations in the conclusions that can be drawn from the within-participants analyses. It is likely there were factors that influenced changes in student outcome measures like development/growth and transitions from one school to another that cannot be accounted for, so our results of the analyses should be interpreted with caution. It is critical that when we find differences from one year to the next, whether positive or negative, that we do not assign causation for these changes to the program. In all analyses we present descriptive statistics, and where numbers of cases in the analysis allow³³, we also report on statistically significant differences and effect sizes.

Employability outcomes. Because survey responses to the employability questions use a Likert scale, we used the Wilcoxon signed-rank test to analyze the pre- versus post-program differences for interns with both surveys for those items. The Wilcoxon signed-rank test is the nonparametric test equivalent to the dependent *t* test. It is used to compare two sets of scores that come from the same participants when the data are not normally distributed, and the dependent variable is measured at the ordinal level. The data met the assumption for a symmetrically shaped distribution of differences for the pre- and post- scores for all interns for all items, as assessed by histograms.

Wilcoxon signed-rank tests were run on the employability data for 2016 interns who completed an internship and for whom we had pre-training and post-internship surveys. Discover and Achieve students were examined as separate groups.

Differential experiences analyses. To examine whether there was a relationship between the number of weeks worked or the number of hours per week worked on school outcomes and

³³ In analyses with a small number of cases, we have low power to detect anything but a large effect size.

employability outcomes, we calculated descriptive statistics for the Achieve interns in 2016 with at least 75% enrollment in Minneapolis Public Schools in SY16 and SY17 for whom we also had 2016 end-of-summer survey data (the source of information on weeks and hours worked). There were 154 interns who met these criteria. There were a number of school outcomes that lacked adequate data for an analysis—on track to graduate, MCA reading scores, referrals, removals, and suspensions. For the other school outcomes (GPA, attendance, MCA math, and ACT) we conducted ANOVA tests, and where assumptions were violated we also ran the nonparametric Kruskal Wallis test. For employability outcomes we used the Kruskal-Wallis H test.

To examine whether there was a relationship between multiple-year participation and school and employability outcomes, we calculated descriptive statistics for interns in 2016 with at least 75% enrollment in MPS in SY16 and SY17. For the 420 interns for whom we had data, we compared students who did an internship only in 2016 with those who did an internship in 2016 and in 2014 and/or 2015. These analyses were run separately for Achieve and Discover students, and analyses were conducted using independent samples *t* tests and the nonparametric Mann Whitney tests. Analyses were performed on GPA, attendance, ACT scores, and MCA scores. For employability outcomes we used a Chi-square test.

Intent-to-treat analyses were not performed due to the nature of the designs. Comparison groups were formed through propensity score matching. Randomization of students to program or control groups was not possible for this study.

Study Logistics

The study proceeded as planned. There were no issues or changes to the timeline or budget. There were no changes to evaluation personnel at CAREI. The research/evaluation staff position at AchieveMpls changed over the period of the grant; five different people held the position. Those changes did not affect the conduct of the study. There were no problems with the IRB.

Findings: Implementation Evaluation

Descriptive Participant and Program Statistics/Outputs

Program delivery timeline. The STEP-UP programming cycle for the summer internships program runs from December through August. Beginning in December, STEP-UP staff members recruit students to apply to the program. Students apply to the program and complete STEP-UP job training throughout the spring. After training, students interested in having an internship submit an additional application detailing their availability, job skills and work preferences. In May and June, students are placed with employers. Students complete their internships in mid-August, although exact start and end dates are determined by each employer.

Training. In 2016, STEP-UP received 3,447 eligible applications; 3,447 students were accepted and invited to attend training, and 2,036 completed work readiness training (the SEP target was 2,200). These numbers are higher than in 2015; total eligible applicants increased by about 400 students, and 157 more who completed training.

3,447
Eligible Applications
2,036
Completed Work-readiness Training
420
Discover interns attended weekly summer trainings

Among Discover interns, 420 attended weekly training classes during the summer and earned a total of 719 credits. Interns were paid for their time in training. See Table 2 for a comparison across years of program targets and actuals.

Table 2

	2014		2015		2016	
	Target	Actual	Target	Actual	Target	Actual
Eligible Applications	3,754	3,678	4,000	3,062	4,000	3,447
Accepted to program	3,678	3,582	3,800	3,003	3,100	3,447
Completed Work-Readiness Training	2,200	2,076	2,125	1,879	2,200	2,036
Internships started	1,500	1,425	1,400	1,238	1,420	1,389
Completed internships	1,278	1,222	1,300	1,132	1,310	1,272
Companies/Organizations participating		268		212		226
Supervisors		539		505		513
Specialized Training/Career Enrichment Activities (20 hours or fewer)	250	576*	470	491	500	424
Specialized Training/Career Enrichment Activities (more than 20 hours)			82	124	85	120

STEP-UP Targets and Actuals

*2014 was prior to the distinction between activities of more or less than 20 hours.

Specialized Training/Career Enrichment Activities. A description of specialized training programs and career enrichment activities can be found in Appendix D. In 2016 there were 424 completed career enrichment activities of 20 hours or fewer and 120 completed activities of more than 20 hours. Some individuals participated in more than one, so the numbers reflect “units of service” rather than discrete interns. There were at least 315 different students who completed career enrichment activities. Due to a glitch in the record keeping for one of the large enrichment programs, we were unable to calculate a precise number; the total number of students who participated in at least one activity is probably 75-90 more if we use 2015 records as a guideline. Shorter programs included Golden Gopher Day at the University of MN and a Financial Education Day. Longer programs included Scrubs Camp (careers in health sciences) and Microsoft Excel training. Of the 544 who completed enrichment activities, 247 completed

specialized career training. Forty-three earned professional credentials (28 Excel, 15 IT Training Credential). See Table 2 for a comparison across years of program targets and actuals.

Internships. We have assembled descriptive statistics about interns, supervisors, and placements.

Interns. Of the 2,036 students who completed work readiness training, 1,389 (680 Achieve; 709 Discover) were placed in more than 226 companies. This number was 31 short of the 2016 target for internships begun but was an increase of about 150 students over 2015. Summer internship providers included businesses, public agencies, and nonprofits, of which 64 were new partners or were returning after a hiatus. Of the 1,389 students placed, 1,272 completed internships (617—91% Achieve; 655—91% Discover). During the summer of 2016, STEP-UP interns earned approximately \$2.29 million in wages (\$1,346,340 through Achieve; \$944,886 through Discover).³⁴ See Table 2 for a comparison across years of program targets and actuals.

1,389
placed in internships
1,272
completed internships
226
companies employed
interns
513
supervisors
\$2.29 million
wages earned by
interns

Of the students who completed an internship in 2016, there were more girls than boys. The largest of the four training groups was Achieve (34%), followed by HS Discover, MS Discover, and Advanced. Most of the interns (90%) were eligible for free or reduced lunch and a very small number were homeless or highly mobile.³⁵ There were more African American participants than any other racial group. Details on student demographics for all youth who completed an internship in 2016 are presented in Figures 2-5. For further details, refer to Appendix I. The overall demographics are the same across the three years as shown in Table 3.

³⁴ Data on wages earned by Achieve interns are an estimate based on data provided by those Achieve interns who completed the end-of-summer survey. Because of the way the data were reported (ranges), that we do not have data on all the internships, and we are unsure of the reliability of the data we do have, we cannot calculate descriptive statistics such as means or medians for total wages or hourly wages.

³⁵ There are two reasons why the number is not 100% of participants. Interns may meet other eligibility criteria such as having an IEP or being pregnant or parenting. It is also possible that some of the interns' families meet the income requirement, but have not submitted the required paperwork for "free and reduced lunch" status.

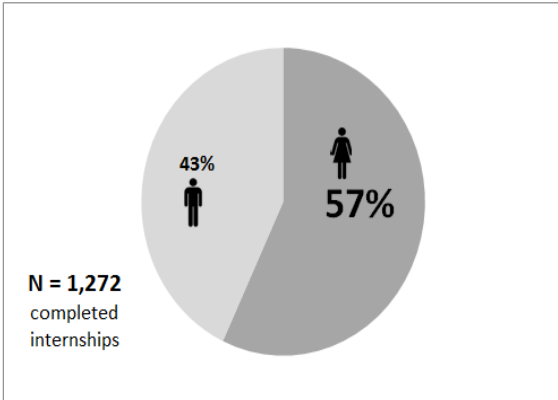


Figure 2. Percentage of interns by gender.

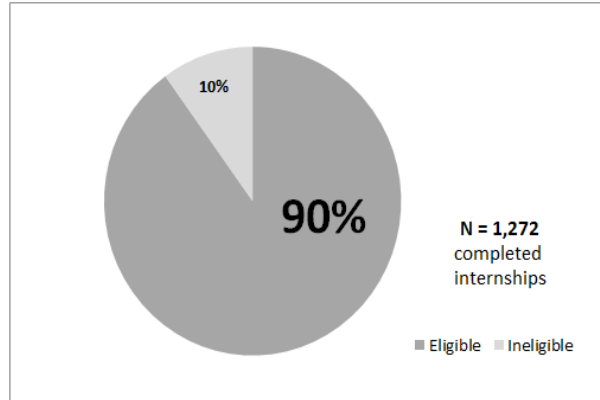


Figure 3. Percentage of interns eligible for FRL

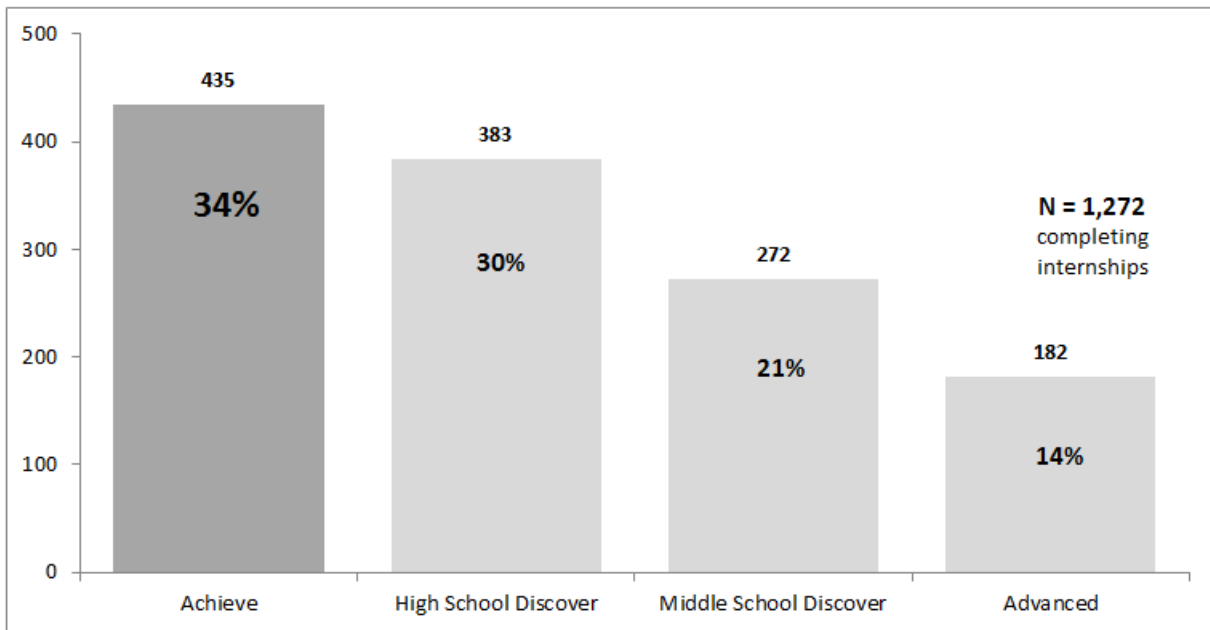


Figure 4. Number and percentage of interns by training group.

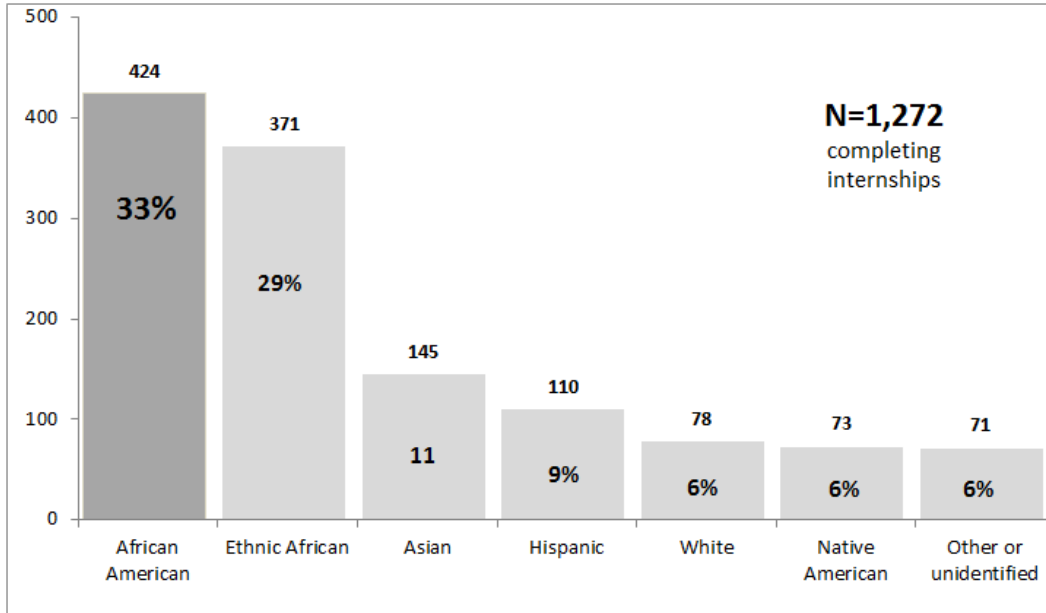


Figure 5. Number and percentage of interns by racial/ethnic group.

Table 3

Intern Demographics, 2014-2016

		2014: All Interns N = 1,242	2015: All Interns N = 1,132	2016: All Interns N = 1,271
GENDER	Male	42% (513)	42% (473)	43% (552)
	Female	58% (709)	58% (659)	57% (720)
RACE/ETHNICITY	African American	79% (847)	62% (700)	62% (795)
	Native American	3% (31)	9% (102)	6% (73)
	Asian	13% (159)	11% (123)	11% (145)
	Hispanic	7% (87)	7% (82)	9% (110)
	Caucasian	7% (81)	5% (58)	6% (78)
	Missing or Other		6% (67)	6% (71)
FRL	Yes	85% (1,039)	89% (1,007)	81% (1,028)
	No	14% (171)	11% (125)	9% (114)
	Not Applicable or Missing	1% (12)		13% (77)
HOMELESS	Yes	1% (12)	2% (24)	3% (42)

	No	97% (1,185)	98% (1,108)	97% (1230)
	Missing Data	2% (24)		
SPECIAL ED	Yes	11% (132)	13% (144)	14% (172)
	No	88% (1,070)	86% (970)	86% (1,100)
	Missing Data	2% (20)	2% (18)	

Among Achieve interns who responded to the survey, 71% worked eight weeks or more. Some internships were shorter in length. Achieve interns worked 20 to 40 hours per week. Twenty-eight percent of interns who responded to the survey worked 16 to 25 hours, 20% worked 26 to 34 hours per week, and 27% worked 35-40 hours per week. Discover interns worked nine weeks. Discover interns were limited to 23 hours a week in 2016 (including three hours of class per week); this was a change from previous years. In making the change, the program placed over 100 additional youth using the same funding. Prior to the summer of 2016, 32% of Achieve participants and 63% of Discover participants had never held paying jobs. (More details about intern characteristics can be seen in tabular form in Appendix I.)

513
STEP-UP Supervisors
385
Achieve Supervisors
128
Discover Supervisors

Supervisors. There were 513 supervisors to STEP-UP interns. In the Discover track, 128 people supervised interns. Of the 128 supervisors, 29 worked with a single intern and 99 had multiple interns. There were 385 Achieve supervisors. Among Achieve supervisors, 298 worked with a single intern and 87 had multiple interns. Approximately 93% of Achieve supervisors (358) and 95% of Discover supervisors (122) attended an orientation before the summer program began; this was the highest rate of attendance in the history of the program.

Placements. Achieve and Advanced interns worked in placements across different types of industries. The industries with the largest concentration of Achieve interns were Government/Public Administration, Health Science, and Education/Training. Discover interns worked in the nonprofit sector only; over 67% of Discover interns worked in Human Services or Outdoor/Natural Resources. The types of organizations in which they were placed also varied and included Arts, AV/Technology and Communication and Education/Training. (The industries for intern placement are enumerated in Appendix J.)

Fidelity to Program Design

In all of its major components (training, placement, supervision, and career enrichment activities) the STEP-UP program demonstrated fidelity to the plan outlined in the 2013 SEP. The requirement for training, number of hours of training, training content, procedures for placing

interns, the nature of the work with supervisors, the types and lengths of internships, and the offering of a range of career enrichment activities were consistent with that plan.³⁶

Dosage

Training. Middle School Discover training is 12 hours. High School Discover training is 13 hours including a mock interview. Achieve and Advanced trainings are 9 hours including a mock interview. Discover interns attended 3 hours a week of training throughout the summer internships.

Internships. Each intern had an internship experience over the course of the summer. The analysis included interns who completed an internship.

Career enrichments/pipelines. Some interns participated in multiple enrichment activities, some in one activity, and some not at all. Length of activities varied from two hours to over twenty hours.

Quality

Given the vast range of settings and experiences of internships, the limited control of STEP-UP staff over interns' experiences, and limitations on the amount and quality of data related to those experiences, it was not possible to measure internship quality. We were able to examine the guidelines and recommendations that program staff provided to supervisors in orientations, handbooks, and emails during the summer, and to infer what the staff consider contributing factors to a high-quality internship. We examined those elements of quality for which data were available (exposure and satisfaction) and present those findings below.

Exposure

Training. Because the STEP-UP staff planned and delivered training and it was consistent for all students at each training level, we considered training part of dosage and not exposure.

Internship exposure: time worked. The internship site controlled the number of hours and number of weeks Achieve interns worked; time at internship is therefore considered exposure. Interns work an average of eight weeks during the summer, but some internships are shorter. The average hours worked per week ranged from fewer than 10 hours to more than 40 hours. Among Achieve interns, 28% of those who responded to the survey worked 16 to 25 hours,

³⁶ There were tweaks to the training curriculum made over time, including the creation of a special track for Advanced students (see program description, pg. 49). The basic components of the program, including training, remained consistent with the plan described in the SEP.

20% worked 26 to 34 hours per week, and 27% worked 35-40 hours per week. Discover internships in 2016 were limited to 20 hours per week plus three hours of classroom experience. Pipeline, or career enrichment (referred to in the program logic model as systems building), activities were mostly optional. Some interns did not participate in any, and some participated in several. Of those who participated, experiences ranged from two hours to over twenty hours.

Internship exposure: activities. The STEP-UP program staff recommended ways for supervisors to structure internships and experiences to provide to interns; the supervisors at the sites had control over what actually happened and the nature of the experiences varied as a result of the particular industry, job, and supervisor. Recommendations from STEP-UP staff were communicated in the orientation, supervisor handbook and weekly emails to supervisors. The recommendations were:

- Providing a job description; creating a work plan (expectations and goals)
- Implementing a strategy for supporting the intern (giving clear directions, checking in regularly and reflecting on the experience together, talking to them about future plans, helping them develop professional skills, talking to them about the company and its activities, talking about their own education and work history)
- Establishing a project for the intern to undertake
- Assigning of a mentor (either the supervisor or another adult)
- Giving regular feedback to the intern (including a mid-internship check-in and a performance evaluation)
- Providing interns with opportunities to learn about a career in the specific fields through activities such as job shadow, attending meetings, informational interviews
- Encouraging and providing opportunities to the interns to develop their network (e.g., lunch with supervisor, attending social gatherings with colleagues, meeting the president or CEO, attending meetings)
- Offering specialized training (e.g., Excel, Outlook)

For the purposes of analysis, these structures and activities can be grouped into five categories: structure and orientation, interpersonal experiences, supervision, opportunities for learning, and intern voice.

In the post-internship survey approximately 457 out of the 617 (74%) Achieve interns who completed an internship responded to questions about their internship experiences and their supervisors. In the post-internship survey, approximately 379 out of the 657 (58%) Discover interns who completed an internship responded to questions about their internships and supervisors, including questions about exposure. In the end-of-summer survey approximately 236 of the 385 (61%) Achieve supervisors and 105 of the 128 (82%) Discover supervisors responded to questions about their experiences with interns, including questions about internship exposure.

Highlights of reporting on internship exposure follow. Details can be found in Appendix K.

Orientation/structure. Discover and Achieve interns felt they were well-orientated to their internships. About 3/5 of each group had structured work plans with measurable goals. Supervisors also responded to a question on the use of a structured work plan with measurable goals. Their responses showed that there was variation across internships in the extent to which interns had structured work plans with measurable goals. About two-fifths of Achieve supervisors gave strong ratings to this item and another two-fifths gave moderate ratings. There was some misalignment here with the interns' responses (Interns—59% strong vs. Supervisors—44% strong). Just over half of Discover supervisors gave strong ratings to this item, whereas 61% of interns gave it a strong rating. In examining the discrepancies between supervisor and intern perspectives, an important consideration is that we did not have intern and supervisor respondents from exactly the same internships completing the surveys. While it is possible that interns and supervisors had different perspectives, the differences may be a result of respondents describing different internships.

Interpersonal experience. Most Discover and Achieve interns indicated they were comfortable at work and were treated respectfully. About 1/3 of each group indicated their supervisors could be more sensitive to cultural differences.

Opportunities for Learning. More than 3/4 of Discover interns and nearly 4/5 of Achieve interns felt strongly that they learned job-related skills; supervisors had similar responses, though Achieve interns gave stronger responses than the supervisors. More than half of Achieve supervisors (57%) and Discover supervisors (57%) chose strong responses about having a *mix of short and long-term projects*. This aligned fairly closely with the interns' responses. Approximately 3/4 of interns reported that someone talked to them about future plans and a career in the field at least a few times during the internship. Interns and supervisors gave different feedback on how challenging tasks were in their internships. Supervisors tended to think tasks were more challenging than interns did. More than half of Achieve supervisors (54%) gave strong ratings, whereas 43% of interns did. The differences between Discover supervisors and interns were greater. Sixty percent of Discover supervisors gave strong ratings; only 37% of interns did. Some combination of factors may explain the discrepancies including the fact that some of the data refer to different internships (e.g., we may have a survey response from a supervisor but not the corresponding intern or vice versa) and that the responses are estimates or impressions. On opportunities to *learn about a career in the field*, about 4/5 of Achieve supervisors said interns had experiences at least a few times over the summer; this was about the same as interns' responses. About 3/4 of Discover supervisors said interns had such experiences; the interns responded similarly.

Voice and Choice. About 2/3 of interns in each group felt strongly that they had input and choices about what they did during their internships.

Supervision. Many supervisors did *not* use the Hirability Skills framework in working with their interns. Among those who used the Hirability Skills framework, about half said it was moderately helpful. More than half of Achieve supervisors and two-thirds of Discover supervisors reported spending an hour or more each week teaching job-related skills to their interns. Three-fifths of supervisors reported spending 15-45 minutes per week on each of the following: developing or reviewing work plans, giving feedback, checking in, and talking about the career field.

Interns reported getting more frequent feedback than supervisors reported giving it. The majority of Achieve supervisors reported *giving feedback* to their interns a few times over the summer or once a week. Nearly a third gave feedback a few times a week or every day. Achieve interns reported getting feedback more frequently; close to half (45%) said they got feedback a few times a week or daily. Half of Discover supervisors also reported giving feedback to their interns a few times over the summer or once a week. Nearly half of Discover interns (47%) said they got feedback a few times a week or daily.

Participant Satisfaction: Interns

Training. Students at all training levels rated their experiences highly—both on the trainers and the content. Those completing an internship used their skills from training in their jobs and said that training prepared them for their experiences. Students reported that training content was not new to them, especially those in the Advanced training level. In open-ended questions about how to improve the program, interns made numerous suggestions about how training could be improved. The most common recommendation was that the training be shortened. See Appendix L for a more detailed analysis of the trainee response data, data in tabular form, and suggestions for improvement.

Internships. Most Achieve interns had internships related to their interests. Almost all interns agreed that their internships were a valuable learning experience. Almost all interns felt they made a valuable contribution to their workplace. Internships helped 78% of Achieve interns and 69% of Discover interns decide what career to pursue in the future. Almost half of Achieve interns indicated a likelihood of staying in touch with their STEP-UP supervisors. About 37% of Discover interns expressed that intention. Interns reported many benefits from participating in STEP-UP. These included personal learning and growth, professional learning, and the building of relationships. Most STEP-UP supervisors (93% Discover, 85% Achieve) felt their interns made a valuable contribution to their organization. Most (88% Discover, 83% Achieve) also felt their interns were a good fit for the position. Supervisors also reported benefits from their participation.

These included supporting the development of youth, harnessing energy and perspectives of youth in the workplace, expanding their supervisory/mentoring skills, learning about interns' cultures, and getting help at their sites.

Placements. Over 4/5 of Achieve interns found their job placements related to their interests (82%). Slightly fewer Discover interns found their job placement was a good fit with their personal interests (3/4 agreed or strongly agreed (75%). See Appendix L for details.

Interns commented about the placements in open-ended questions. Many of them expressed gratitude for the placements, and for placements in their fields of interest. About her placement one intern said, "I love it there and I'm making a huge difference in the community." Some were unhappy with their placements. Others wished there were more options and job opportunities in different fields. A sample of comments about the relationship between interns' interests and their placements can be found in Figure 6. Some interns found that the internship helped them recognize an area of interest for further exploration. Some reported being placed in an area that they thought interested them, only to learn through the internship that this was not really a field for them. For others, the internship helped confirm their desire to work in the field.

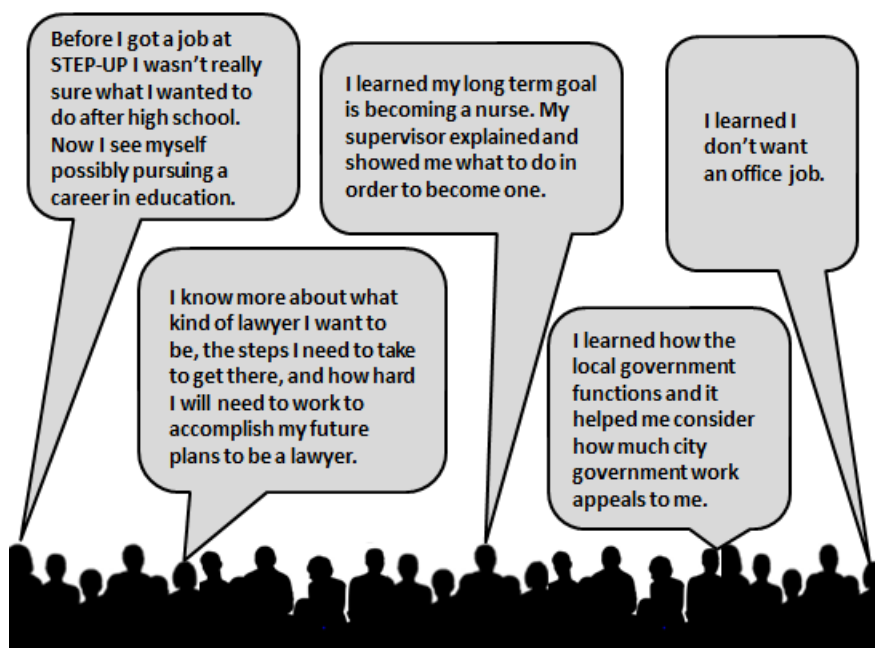


Figure 6. Intern comments on placements.

Work Experience. As Figure 7 shows, Achieve interns found their internships to be valuable learning experiences (96% agree or strongly agree). More than three quarters of Achieve interns (78%) who responded to the survey reported that their jobs helped them decide what career to pursue in the future. Ninety-five percent of Achieve interns felt they made valuable contributions to their workplaces. These results are consistent with responses to surveys in 2014 and 2015.

Discover interns, whose responses are shown in Figure 8 below, also found their internships to be valuable learning experiences (95% agree or strongly agree). Over two-thirds (69%) of Discover interns who responded to the survey reported that their jobs helped them decide what career to pursue in the future. Ninety-six percent of Discover interns felt like they made a valuable contribution to their places of work. These results are consistent with responses to surveys in 2014 and 2015.

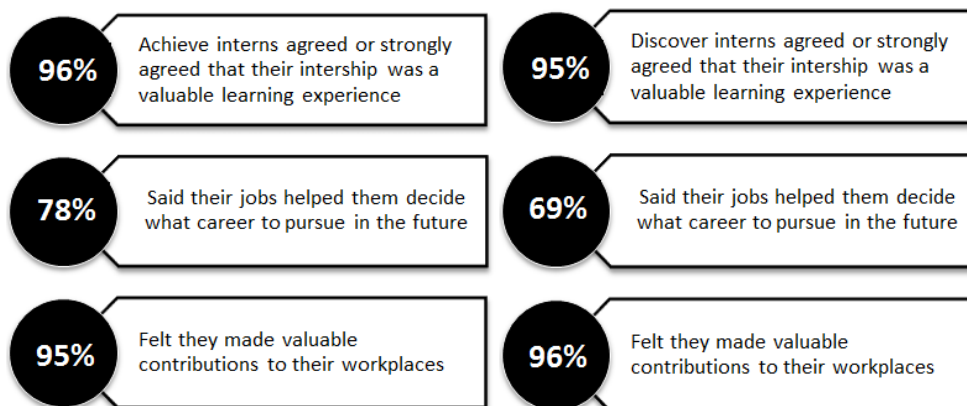


Figure 7. Achieve satisfaction of work experience

Figure 8. Discover satisfaction of work experience

Experience with Supervisors. In open-ended comments about supervisors, interns mentioned specific things they valued in their supervisors: providing help and support, finding appropriate and interesting things for the intern to work on, talking about careers and future planning, giving advice about future education. Nearly all the comments about supervisors expressed appreciation. In a few comments, though, interns had negative feedback about supervisors. These interns said they did not get along well with their supervisor, that their supervisors weren't adequately prepared to have an intern, the supervisor was not present consistently, or didn't provide challenging tasks, direction or feedback. One mentioned the need for an understanding of Ramadan and what it means for Muslim interns.

Support from STEP-UP. For information on the support interns received from STEP-UP during the summer, gathered primarily for the purpose of program improvement, see Appendix L.

Perceived Benefits. Many interns who completed the survey responded to open-ended questions about how they benefited from their work experiences. A summary of perceived benefits appears in Figure 9 below; the benefits fell into the categories of personal learning, professional learning and relationship-building. A more detailed analysis appears in Appendix L.

Suggestions from interns for improving the program can be found in Appendix L.

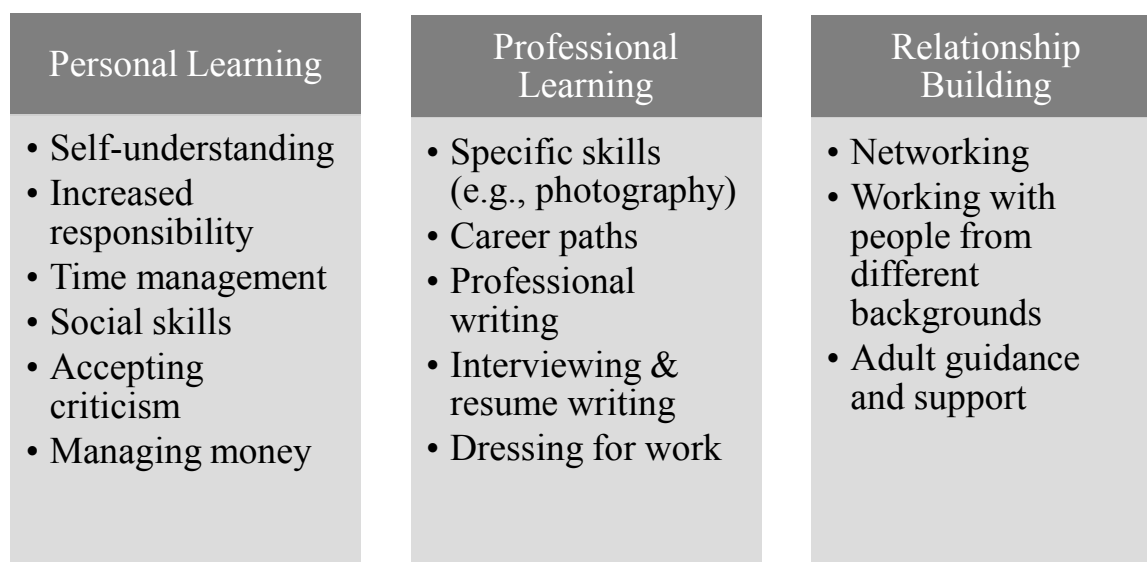


Figure 9. A selection of benefits of STEP-UP reported by interns.

Participant Satisfaction: Supervisors

From the perspective of the majority of supervisors, STEP-UP was a success in their organizations. Among the Achieve supervisors responding to the end-of-summer survey ($n = 224$), 80% said STEP-UP was moderately to very successful at their site. Of the Discover supervisors responding to survey ($n = 95$), 94% said STEP-UP was moderately to very successful at their site. (See Appendix L for tabulated results.)

Placement. Supervisors responded to the question, “Was the student matched to your company a good fit for the job?” Of the Discover supervisors who responded to the question on the survey, 88% felt their interns were a good fit. Of the Achieve supervisors, 83% felt the fit was good. Among the supervisors who said the fit was not good, the most frequently cited reasons they gave were that the students lacked the needed skills or were not reliable. In open-ended

questions about how to improve the program, several suggestions were offered about how the matching process could be improved (See Appendix L).

Supervisors also responded to the question, “Overall, did your intern make a valuable contribution to your organization this summer?” Among the supervisors who responded to the question, 93% of Discover supervisors ($n = 102$) and 85% of Achieve supervisors ($n = 224$) felt their intern made a valuable contribution to their organization. There was closer alignment on this question between Discover supervisors and interns (96% of interns) than between Achieve supervisors and interns (95% of interns).

Time commitment. In the end-of-summer survey, supervisors were asked how the actual time they spent training and supervising interns compared to the time they expected to spend. The majority of supervisors in both Achieve and Discover spent about the same amount of time supervising interns as they expected.

Support from STEP-UP. For information on the support supervisors received from STEP-UP during the summer, gathered primarily for the purpose of program improvement, see Appendix L.

Perceived benefits. In response to an open-ended question about what they most enjoyed about serving as a STEP-UP supervisor, respondents reported that they valued helping young people learn about the workplace, supporting the development of their skills, and watching them grow. Many of them appreciated the energy and perspectives the young people brought to the workplace. For many of the supervisors, the experience of mentoring a young person was an opportunity to expand their own skill sets. They reported learning from the students, including learning about the cultures from which the interns came. Many appreciated the opportunity to develop relationships with youth. Some supervisors mentioned the contributions the interns made to projects at their workplace.

Suggestions from supervisors for improving the program can be found in Appendix L.

Student Perceptions of the Program

Achieve staff members reported on the findings that emerged from the group interviews they conducted about perceptions of the STEP-UP program (see description of the study in the section on Method on pg. 18). The interviews grew out of a concern by program staff that there are eligible students who miss the opportunity to do a STEP-UP internship (including students who apply and even participate in training). The interviews explored students’ perceptions of the program and staff planned to use what they learned to improve program recruitment and retention.

Non-participants and Discover interns. The first set of findings came from students who

had not participated in the program at all or who had participated only in Discover. These students saw STEP-UP as a way to get a job and earn money when they were not old enough to get one on their own, and a means for developing job skills and clarifying their interests. They were influenced to apply by people (parents, friends, teachers) and by the prospect of earning money. STEP-UP's messaging about developing a long-term career trajectory did not appear to be an influence with these students.

Retention (from training through internship and from one year to the next) appeared to be negatively influenced by a number of factors:

- training (e.g., work readiness training was too long, repetitive)
- assurance of a job (e.g., there is no guarantee of a job even if a student completes training)
- time lag (there is a long wait between the end of training and notification of hiring; students feared that if they waited and did not get a job it would be too late to find something else)
- perceived lack of choice of job (not adequate choice or being placed in a job unrelated to their interests)
- limited duration of internship opportunities (e.g., students wanted work year-round and not just in the summer)

Retention from one year to the next also appeared to be influenced by previous experiences in STEP-UP, including the relationship with one's supervisor and the extent to which the interns enjoyed the work they did. Many of the students who saw STEP-UP as a program for youth too young to get jobs otherwise expressed interest in "getting a job on their own," once they got some experience and were old enough to do so. Students did not understand the differences between Discover and Achieve except that one is for younger and the other for older students. They were unaware of the variety of jobs in Achieve, for example.

Achieve interns. There was some overlap in these perceptions and those of interview participants who had Achieve internships. They echoed the idea that students generally get started in STEP-UP as a way to have a job and earn money as a young teen. At this age they did not see the longer-term value of the program such as career development and networking. These Achieve interns listed numerous benefits of the program, including the development of both soft skills and job-related skills. They saw training as a benefit, though they also found it too long and repetitive. These students were able to differentiate between Discover and Achieve (e.g., Achieve involves more options for work, more responsibility, greater choice of work), and acknowledged understanding the differences only when they participated in Achieve. These interns also talked about the desirability of jobs that extended beyond the summer into the school year.

Summary of Study Findings by Evaluation Questions

The discussion that follows summarizes the findings according to the research questions upon which the study was based.

1. Has the STEP-UP program implemented all of its major components with fidelity?
 - a. To what extent have the youth output targets been met? (comparison of current year's outputs to current year's targets)

Youth output numbers were generally higher in 2016 than in 2015. In all categories where there were targets, actual numbers were lower than the 2016 targets.

Eligible applicants. Compared to targets for 2016, the actual number of eligible applications fell short of targets by 553 (4,000 vs. 3,447). There were more applicants in 2016 than in 2015 (3,062) but not as many as in 2014 (3,678).

Work-readiness training completers: Compared to targets for 2016, the number of students completing work-readiness training fell slightly short of the target (2,200 vs. 2,036). More students completed work-readiness training than in 2015 (1,879) and was close to the number in 2014 (2,076).

Internships completed. In 2016, the number of youth completing internships fell shy of the target (1,310 vs. 1,272). However, more youth completed internships in 2016 than in 2015 (1,132) and in 2014 (1,222).

Extra enrichments/specialized career training. For activities of 20 or fewer hours, 424 interns participated in 2016. Due to a glitch in the record keeping for one of the large enrichment programs, we were unable to calculate a precise number; the total number of students who participated in at least one activity is probably 75-90. For this reason, it is difficult to compare the number of actual participants to the target of 500 or to the number for 2015 (470). For activities longer than 20 hours, 120 interns participated in 2016, more than the target. This was a slight drop from 2015 (124).³⁷ At least 315 different students completed pipeline/career enrichment activities.

Work-based learning credit. Four hundred twenty Discover interns attended weekly training classes during the summer and earned a total of 719 credits. No targets were

³⁷ Comparisons to 2014 are not included. Prior to 2014 distinctions were not made between activities on the basis of program length. The number of youth who participated in any enrichment in 2014 was 522.

set for learning credits. In 2015, 522 attended weekly training classes and earned 859 credits. In 2014, 394 interns earned 750 credits.

Wages. In 2016, STEP-UP interns earned an estimated \$2.29 million in wages (\$1,346,340 through Achieve; \$944,886 through Discover). There were no targets for wages. The overall number is about the same as in 2015, but in 2016, Achieve interns earned more than the previous year and Discover interns earned less. (\$1,164,563 through Achieve; \$1,102,895 through Discover). In 2014 total wages were higher—approximately \$2.4 million (\$1,130,688 through Achieve and \$1,315,376 through Discover).

b. To what extent have the employer output targets been met?

Number of available internships. In 2016, 1,389 internships were available, falling short of the target (1,420) yet exceeding the number available in 2015 (1,238). However, the number of available internships in 2016 still represented a reduction from the number that was available in in 2014 (1,425).

Number of companies. In 2016, 226 companies had STEP-UP interns. This was an increase over 2015 (212 companies) and a decrease from 2014 (268). While the program sought to increase the number of companies in 2016 over previous years, they did not have exact targets. Targets were set for the number internships and not companies.

Number of supervisors. In 2016, 513 supervisors worked with STEP-UP interns. This was a small increase over 2015 (505) and was fewer than in 2014 (539). No targets were set for the number of supervisors.

Types of settings. Achieve interns served in a range of industries as well as non-profit and government settings. While Discover interns worked in the nonprofit sector only, the types of organizations in which they were placed also varied. See Appendix J for a list of industries and the numbers/percentages of interns in each.

c. To what extent have systems building output targets been met?

Enrichment opportunities. Enrichment opportunities included programs of under 20 hours to those over twenty hours. Some provided general information for youth (getting ready for college; financial literacy), others about specific careers (included required training for particular internships), and others for general skill acquisition. For a complete list of these opportunities, see Appendix D.

Systems building. The program has moved from using the language of systems-building and now talks about enrichment opportunities for youth in various fields of employment.

See section 1(a) above on youth for enrichment targets.

- d. How do the components of the implemented STEP-UP program compare to those described in the proposal?

The components of the program (training, internships, enrichment opportunities) are the same as those described in the SEP proposal of 2013. There have been program refinements in the components based on staff learning over time.

- e. What was the nature of student training for STEP-UP?

There were four levels of training—Advanced, Achieve, HS Discover, and MS Discover. AchieveMpls runs the first three; the City of Minneapolis contracts Project for Pride in Living to run the fourth. Training takes place in the spring prior to the internship on Saturdays. A separate component of the training process is a weekday mock interview for the Advanced, Achieve, and HS Discover levels. A detailed description of the training process is located on pages 10-11 in this report. An outline of the training curriculum can be found in Appendix B.

There was not a formal evaluation of training by the training staff in 2016. Based on experiences with training, informal feedback from trainers, and feedback from youth on end-of-summer surveys, the curriculum for training is being rewritten for the spring of 2018.

Students at all training levels rated their training experiences highly—both on the trainers and the content. Those completing an internship used their skills from training in their jobs and said that training prepared them for their experiences. Students reported that training content was not new to them, especially those in the Advanced training level. In open-ended questions about how to improve the program, interns made numerous suggestions about how training could be improved. The most common recommendation was that the training be shortened. See Appendix L for a more detailed analysis of the trainee response data, data in tabular form, and suggestions for improvement.

- f. Who were the participants in the program?
- More girls than boys completed internships in 2016 (57% vs. 43%)

- The racial/ethnic breakdown was 33% African Americans, 29% ethnic Africans, 11% Asians, 9% Hispanic, 6% Native Americans, 6% white, and 6% other or unidentified
- 90% of interns were eligible for free or reduced price lunch
- Just over 2/3 of Achieve interns held paying jobs prior to the 2016 internship; nearly 2/3 of Discover interns had never held a paying job

g. What was the participants' satisfaction with the program?

In summary, there were high levels of satisfaction with the program among youth who completed an internship and among supervisors. The data are presented in Appendix L.

- Most Achieve interns had internships related to their interests. The relationship was less strong for Discover interns, but the majority of all interns had jobs related to their interests
- Almost all interns agreed that their internships were a valuable learning experience
- Almost all interns felt they made a valuable contribution to their workplace
- The majority of interns said their internships helped them decide what career to pursue in the future
- Almost half of Achieve interns indicated a likelihood of staying in touch with their STEP-UP supervisors. Over one-third of Discover interns expressed that intention
- Most STEP-UP supervisors felt their interns made a valuable contribution to their organization. Most also felt their interns were a good fit for the position
- Interns reported many benefits from participating in STEP-UP. These included personal learning and growth, professional learning, and the building of relationships
- Supervisors reported these benefits: supporting the development of youth, harnessing the energy and perspectives of youth in the workplace, expanding their supervisory/mentoring skills, learning about interns' cultures, and getting help at their sites.

h. What was the quality of the student internships?

We were not able to measure internship quality given variation in settings and availability and quality of data. We were able to gather data on elements of quality—satisfaction (see (g) above), and exposure.

Staff recommended that supervisors provide the following to support a quality internship experience for students:

- A job description and work plan with expectations and goals
- A strategy for supporting the intern (giving clear directions, checking in regularly and reflecting on the experience together, talking to them about future plans, helping them develop professional skills, talking to them about the company and its activities, talking about their own education and work history)
- A project for the intern to undertake
- A mentor (either the supervisor or another adult)
- Regular feedback to the intern (including a mid-internship check-in and a performance evaluation)
- Opportunities to learn about a career in the specific fields through activities such as job shadow, attending meetings, informational interviews
- Opportunities to develop networks (e.g., lunch with supervisor, attending social gatherings with colleagues, meeting the president or CEO, attending meetings)
- Specialized training (e.g., Excel, Outlook)

Data from intern and supervisor surveys at the end of the summer indicated the following about exposure to these recommended opportunities:

- About 3/5 of Achieve and Discover interns reported having structured work plans with measurable goals; supervisors reported somewhat differently
- Most Discover and Achieve interns indicated they were comfortable at work and were treated respectfully. About 1/3 of each group indicated their supervisors could be more sensitive to cultural differences
- More than 3/4 of Discover interns and nearly 4/5 of Achieve interns felt strongly that they learned job-related skills
- Supervisors tended to think tasks assigned to interns were more challenging than interns did
- About 4/5 of Achieve supervisors and interns reported opportunities to learn about a career in the field and about 3/4 of Discover supervisors and interns reported similarly
- About 2/3 of interns (Achieve and Discover) reported having had input and choice about what they did in their internships

- More than half of Achieve supervisors and two-thirds of Discover supervisors reported spending an hour or more each week teaching job-related skills to their interns
- Three-fifths of supervisors reported spending 15-45 minutes per week on each of the following: developing or reviewing work plans, giving feedback, checking in, and talking about the career field

2. To what extent has the STEP-UP program increased its outputs over time?

The numbers of eligible applicants, students accepted, students completing work-readiness training, students placed in internships, students completing internships, number of internships, and number of supervisors all increased in 2016 compared to 2015. Most of the numbers were lower in 2016 than in 2014. See Table 2 for more details.

3. How do perceptions of the STEP-UP Program impact applications and retention?³⁸

- a. How do youth and personnel in MPS perceive the STEP-UP program?
- Students who had not participated in the program at all or who had participated only in Discover saw STEP-UP as a way get a job and earn money when they could not get one on their own, and as a means for developing job skills and clarifying their interests. They did not tend to see the longer-term value of the program such as career development and networking.
 - Achieve interns echoed the idea that students generally get started in STEP-UP as a way to have a job and earn money as a young teen. At this age or stage of development they did not see the longer-term value of the program such as career development and networking.
 - Students who had the experience of Achieve enumerated benefits of the program, including the development of both soft skills and job-related skills. They saw training as a benefit, though they also found it too long and repetitive.

³⁸ This set of questions about perceptions was added to the SEP modification that was approved in September, 2016. In light of the recognition by program staff that there are eligible students who miss the opportunity to do a STEP-UP internship (including students who apply and even participate in training), project staff wanted to explore perceptions of the program by teens and to use their learning for improving program recruitment and retention. See the methods and findings sections for further information about the study.

- Achieve interns were able to differentiate between Discover and Achieve (e.g., Achieve involves more options for work, more responsibility, greater choice of work) and acknowledged understanding the differences only once they participated in Achieve.
 - Discover interns or non-participants did not seem to understand the differences between Discover and Achieve, except that one is for younger and the other for older students. They were unaware of the variety of jobs, for example.
- b. What factors influence youth to apply to STEP-UP?
- Discover interns were influenced to apply by people (parents, friends, teachers) and by the prospect of earning money.
 - STEP-UP’s messaging about developing a long-term career trajectory did not appear to be an influence with Discover students.
- c. What factors influence youth retention in the STEP-UP program (from application through training; from one year to another)
- The following appeared to be challenges with regard to retention:
 - training (e.g., work readiness training was too long, repetitive)
 - assurance of a job (e.g., there is no guarantee of a job even if a student completes training)
 - time lag (there is a long wait between the end of training and notification of hiring; students feared that if they waited and did not get a job it would be too late to find something else)
 - perceived lack of choice of job (not adequate choice or being placed in a job unrelated to their interests)
 - limited duration of internship opportunities (e.g., students wanted work year-round and not just in the summer)
 - Previous STEP-UP experience could support or interfere with retention, in particular:
 - relationship with supervisor
 - enjoyment of job

Findings: Impact Evaluation

Demographics of the Studied Sample

Details about the demographics of the sample are presented in Table 4. The largest racial group was African Americans. Around 4/5 of the sample was eligible for free and reduced lunch. A very

small percentage of the sample was homeless or highly mobile. In the Achieve sample about 20% were special education students; in the Discover sample there were about 14% special education students. The home language of the majority of Discover students and matches was English; for Achieve that was the case for about 45%. The next most commonly spoken home language was Somali.

Table 4

Demographics of Studied Sample

			Achieve MPS Sample**	Achieve Matched Sample##	Discover MPS Sample**	Discover Matched Sample##
GENDER		Male	47% (127)		48% (108)	
		Female	53% (143)		52% (119)	
RACE/ETHNICITY		African American	60% (163)	51% (95)	60% (135)	50% (77)
		Native American	2% (6)	3% (6)	4% (10)	7% (10)
		Asian	15% (41)	17% (32)	16% (36)	14% (21)
		Hispanic	12% (31)	17% (31)	10% (23)	20% (30)
		Caucasian	11% (29)	12% (22)	10% (23)	10% (15)
		Missing or Other				
FRL		Yes	79% (214)	76% (142)	79% (180)	80% (123)
		No	21% (56)	24% (44)	21% (47)	20% (30)
HOMELESS		Yes	.4% (1)	.5% (1)	0	0
		No	99.6% (269)	99.5% (185)	100% (227)	100% (153)
SPECIAL ED		Yes	20% (54)	20% (38)	14% (31)	14% (22)
		No	80% (216)	80% (148)	86% (196)	86% (131)
HOME LANGUAGE		English	44% (119)	46% (85)	60% (135)	60% (92)
		Hmong	13% (35)	12% (23)	12% (26)	9% (14)
		Somali	23% (63)	22% (40)	16% (37)	15% (23)
		Spanish	11% (29)	12% (22)	9% (20)	12% (18)
		Other/	9% (24)	9% (16)	4% (9)	4% (6)

		Unknown				
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**Interns who were enrolled at least 75% of both SY16 and SY17 for whom we had data on school outcomes
 ##Matched students who were enrolled at least 75% of both SY16 and SY17

First Design, Moderate Evidence: Between-Groups Design with Matched Comparison Groups Based on Propensity Score Matching

Grade point average (GPA). After removing cases with mistakes in data entry for GPA,³⁹ a one-way ANCOVA was conducted to compare SY17 GPA for students who completed an internship in 2016 and matched students after controlling for GPA in the school year before the internship. As illustrated in Table 5, average GPA’s were higher for STEP-UP students than for non-participants, with larger differences between Discover participants and matched students prior to the internship. This suggests that coming into the program and following it, students who participated in STEP-UP in 2016 were stronger students than matched students. After adjustment for GPA in SY16, Achieve interns’ GPA’s were significantly higher than matched students in SY17, $F(1, 448) = 9.391, p = .002, \text{partial } \eta^2 = .021$, but overall GPA decreased for both interns and matched students. After adjustment for GPA in SY16, there was no significant difference found between interns and non-participants in GPA in SY17 for the Discover level, $F(1, 374) = .038, p = .845, \text{partial } \eta^2 < .001$. See Appendix M for information on testing of assumptions and adjusted means. See Appendix N for full model outputs.

Table 5

Comparison of Mean GPA for Interns and Matched Students SY16 and SY17

		Mean GPA SY2016	SD	N	Mean GPA SY2017	SD	N
ACHIEVE	Intern	2.90	.750	270	2.89	.709	270
	Matched	2.68	.846	181	2.63	.815	181
DISCOVER	Intern	2.86	.775	226	2.79	.782	226
	Matched	2.72	.994	151	2.64	1.003	151

Attendance. We examined the outcome of school attendance using a logistic regression model that controlled for attendance in SY16. The analysis included only students who were enrolled at least 75% of both SY16 and SY17. As illustrated in Table 6, both Achieve and Discover interns had higher percentage attendance in both SY16 and SY 17 and all groups had a lower rate of attendance in SY17 than in SY16. Perhaps the most important outcome is that

³⁹ At the Achieve level, 5 cases were removed (3.6%); all were matched students. At eh discover level 2 cases were removed (1.3%); both were matched students.

students in all groups had average attendance rates above 90%. We found a statistically significant difference for both Achieve ($p = 0.0186$) and Discover ($p < .01$) on attendance in SY17 when controlling for attendance in SY16 between interns and matches, and Table 7 provides results of the analysis. While statistically significant, the effect of the difference in practical terms is slight (odds ratio for Achieve, 1.077; odds ratio for Discover, 1.217). The difference between interns and matches at the Achieve level is a difference between an attendance rate of 93% and 91% and at the Discover level between 94% and 92%.

Table 6

Comparison of Rate of Attendance for Interns and Matched Students SY16 and SY17

		Mean % attendance SY16	SD	N	Mean % attendance SY17	SD	N
ACHIEVE	Intern	0.9495	0.0624	225	0.9294	0.0815	225
	Matched	0.9337	0.0721	136	0.9130	0.0946	136
DISCOVER	Intern	0.9508	0.0576	178	0.9370	0.0708	178
	Matched	0.9477	0.0582	111	0.9235	0.0890	111

Table 7

Comparison of Attendance for Interns and Matched Students, Controlling for Attendance in SY16

		Estimate	Standard Error	z-value	p
ACHIEVE	Intercept	-5.31870	0.14593	-36.447	<2e-16 ***
	Attendance 16	8.41456	0.16073	52.352	<2e-16 ***
	Participant or not	0.07440	0.03162	2.353	0.0186*
DISCOVER	Intercept	-6.34490	0.19894	-31.894	<2e-16 ***
	Attendance 16	9.50747	0.21536	44.146	<2e-16 ***
	Participant or not	0.19654	0.03691	5.325	1.01e-07***

*Estimate –the estimated parameter is on the log odds scale.

**z – the Z statistic

*** 0.001

Behavior: referrals, removals, and suspensions. As shown in Figure 10, the data about Achieve and Discover interns and matched students show that the majority (and in some cases nearly all) STEP-UP interns had no involvement with the disciplinary system in Minneapolis Public Schools. Findings about changes in the number of referrals, removals, and suspensions should be considered in light of the larger finding that most STEP-UP interns and their matches had no disciplinary records.

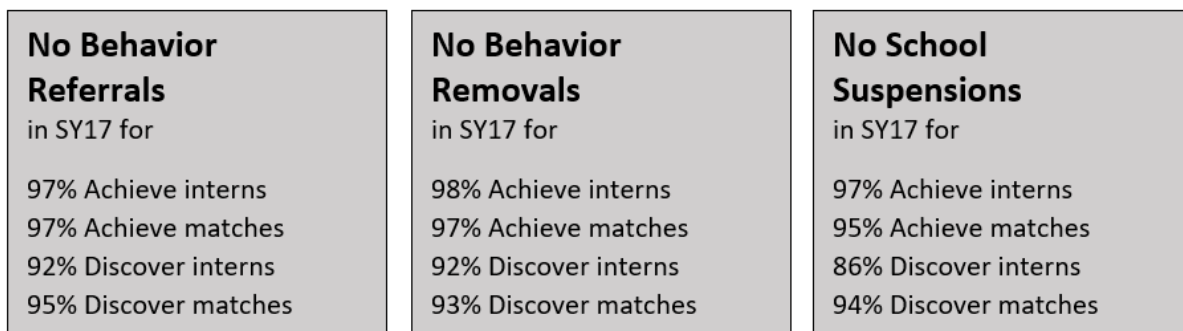


Figure 10: Involvement of Interns and Matched Students in MPS Disciplinary System in SY17.

Behavior Referrals.⁴⁰ Proportions of STEP-UP interns and matched students with behavior referrals were calculated and compared using a chi-square test. All expected cell frequencies were greater than five. Of 270 Achieve participants, only 8 (3%) had referrals in SY17; among matched students, 5 of 186 (3%) had referrals. Achieve students who participated in STEP-UP were no less likely to have behavior referrals than matched students ($X^2(1) = .03, p = .862$). Of 227 Discover participants, 18 (8%) had referrals; among matched students, 8 of 153 (5%) had them. Discover students who participated in STEP-UP were no less likely to have behavior referrals than matched students ($X^2(1) = 1.046, p = .306$). We regressed⁴¹ the outcome, referrals in SY17, onto participation in the program while controlling for referrals in SY16. There were not significant differences between interns and matched students for either Achieve (Wald test statistic = .034, $df = 1, p = .854$) or Discover (Wald test statistic = .695, $df = 1, p = .405$) on behavior referrals. The reader should keep in mind that the numbers of students analyzed was very small.

⁴⁰ Further information about Minneapolis Public Schools’ behavior standards and code of conduct can be found at http://policy.mpls.k12.mn.us/uploads/policy_5200_2014.pdf. Behavior data for the district can be found at http://www.mpls.k12.mn.us/data_behavior and http://www.mpls.k12.mn.us/uploads/ocr_behavior_guidebook_website.pdf. Details about levels of behavior interventions and responses can be found at http://policy.mpls.k12.mn.us/uploads/mps_levels_of_behaviors_interventions_and_responses.pdf

⁴¹ We used logistic regression. See Appendix N for the full model output.

A Mann-Whitney U test was run to determine if there were differences in the number of behavioral referrals (for those students who had them) between STEP-UP participants and matched students. Distributions of the number of referrals for interns and matched students were similar, as assessed by visual inspection. For Achieve, the difference in number of referrals for interns (8) and matched students (5) was not statistically significant, $U = 19, z = -.233, p = .943$. For Discover, the difference in number of referrals for interns (18) and matched students (8) was not statistically significant, $U = 62, z = -.623, p = .605$. These results suggest that participation in STEP-UP did not influence the likelihood or rate of referrals.

Removals. Proportions of STEP-UP interns and matched students with removals (in-school or out of school <1 day) were calculated and compared using a chi-square test. Of 270 Achieve participants, 6 (2%) had removals in SY17; among 186 matched students 5 (3%) had removals. Achieve interns were no less likely to have removals from class than matched students ($X^2(1) = .10, p = .75$). Of 227 Discover interns, 18 (8%) had removals in SY17; among the 153 matched students 10 (7%) had removals. Discover interns were no less likely to have removals from class than matched students ($X^2(1) = .26, p = .61$). We regressed⁴² the outcome, removals in SY17, onto participation in the program while controlling for removals in SY16. There were not significant differences between interns and matched students for either Achieve (Wald test statistic = .003, $df = 1, p = .957$) or Discover (Wald = .004, $df = 1, p = .949$). The reader should keep in mind that the numbers of students analyzed was very small.

Because of the distribution of the data, it was not possible to run a Mann-Whitney U test to compare the differences in number of behavioral removals for those students who had them between STEP-UP participants and matched students.

Suspensions. Proportions of STEP-UP interns and matched students with school suspensions were calculated and compared using a chi-square test. All expected cell frequencies were greater than five. Of 270 Achieve participants, 8 (3%) had suspensions in SY17; among 186 matched students 10 (5%) had suspensions. Achieve interns were no less likely to be suspended from school than matched students ($X^2(1) = 1.692, p = .193$). Of 227 Discover participants, 31 (14%) had suspensions in SY17; of the 153 matched students, 9 (6%) had suspensions. Discover interns were more likely to be suspended from school than matched students ($X^2(1) = 5.865, p = .015$), but the effect is minimal (Cramer's $V = .124$). We regressed⁴³ the outcome, suspensions in SY17, onto participation in the program while controlling for suspensions in SY16. There were not significant differences between interns and matched students for Achieve (Wald test statistic = .530, $df = 1, p = .466$) when we controlled for the prior year's suspensions. At the Discover level,

⁴² We used logistic regression. See Appendix N for the full model output.

⁴³ We used logistic regression. See Appendix N for the full model output.

there was still a statistically significant difference between interns and matched students (Wald test statistic = 6.405, $df = 1$, $p = .011$)

A Mann-Whitney U test was run to determine if there were differences in the number of suspensions (for those students who had them) between STEP-UP participants and matched students. For Achieve, distributions of the number of suspensions for interns and matched students were similar, as assessed by visual inspection. The difference in number of suspensions for interns (8) and matched students (10) was not statistically significant, $U = 33.5$, $z = -.796$, $p = .573$. For Discover, distributions of the number of suspensions for interns and matched students were similar, as assessed by visual inspection. The difference in number of suspensions for interns (31) and matched students (9) was not statistically significant, $U = 108$, $z = -1.541$, $p = .321$.

These results suggest that participation in STEP-UP was related to the likelihood of suspensions but not the rate of suspensions for Discover students, and did not influence the likelihood or rate of suspensions for Achieve students.

ACT composite scores. An independent-samples t test was conducted to compare ACT Composite test scores of STEP-UP interns who completed an internship in 2016 and matched students. ACT tests were taken by 11th graders. For Achieve interns there was not a significant difference in the scores for interns ($N = 110$, $M = 16.65$, $SD = 4.801$) and matched students ($N = 67$, $M = 16.67$, $SD = 4.584$); $t(175) = .023$, $p = .981$. These results suggest doing a STEP-UP internship had no influence on ACT scores for Achieve level students. For Discover interns there was a smaller number of cases with ACT data; there was also not a significant difference between scores for interns ($N = 32$, $M = 16.81$, $SD = 5.27$) and matched students ($N = 21$, $M = 15.71$, $SD = 3.649$); $t(51) = -.832$, $p = .409$. To control for prior achievement, we also conducted a one-way ANCOVA to examine differences between students and matches on ACT composite scores (using GPA in SY16 to represent prior academic achievement since students take this test only once during high school and could not, therefore, use prior scores as a co-variate). There were no differences at either the Achieve level ($F(1, 174) = .201$, $p = .656$, partial $\eta^2 = .005$) or at the Discover level ($F(1, 50) = .945$, $p = .332$, partial $\eta^2 = .004$). See Appendix N for full model outputs.

MCA reading scores. An independent-samples t test was conducted to compare MCA reading test scores of STEP-UP interns who completed an internship in 2016 and matched students. MCA reading tests were taken by 10th graders. For Discover students, there was not a statistically significant difference in scores for interns ($N = 67$, $M = 1038.64$, $SD = 16.242$) and matched students ($N = 60$, $M = 1039.77$, $SD = 17.486$); $t(125) = .376$, $p = .708$. To control for prior achievement with the Discover level, we also conducted a one-way ANCOVA to examine

differences between students and matches on MCA reading tests (using GPA in SY16 to represent prior academic achievement since students take this test only once during high school and could not, therefore, use prior scores as a co-variate). There were no differences at the Discover level ($F(1, 127) = .210, p = .648, \text{partial } \eta^2 = .002$). These results suggest doing a STEP-UP internship did not have an influence on MCA reading scores for Discover students. For Achieve students we had data for only 7 cases. The mean score for interns ($N = 4, M = 1027.25, SD = 16.86$) was slightly higher than for matched students ($N = 3, M = 1024.33, SD = 12.055$). Due to small sample size at the Achieve level we did not run a t test or an ANCOVA because of the instability of parameter estimates. Cohen's d for the difference between mean scores was .20. See Appendix N for full model outputs.

MCA math scores. An independent-samples t test was conducted to compare MCA math test scores of STEP-UP interns who completed an internship in 2016 and matched students. For Achieve there was no significant difference in the scores for interns ($N = 34, M = 1126.38, SD = 15.65$) and matched students ($N = 19, M = 1127.74, SD = 18.187; t(32.9) = .273, p = .787$). These results suggest doing a STEP-UP internship did not influence MCA Math scores. At the Discover level we had data for only 18 students. Levene's test for the Discover level was significant ($p = .006$) and we therefore could not assume equal variances. The mean score for matched students ($N = 8, M = 1127.13, SD = 7.259$) was lower than for interns ($N = 10, M = 1137.30, SD = 22.48$); $t(11.25) = -1.346, p = .205$ and the difference was not significant. To control for prior achievement, we also conducted a one-way ANCOVA to examine differences between students and matches on MCA math tests (using GPA in SY16 to represent prior academic achievement since students take this test only once during high school and could not, therefore, use prior scores as a co-variate). There were no differences at either the Achieve level ($F(1, 50) = .153, p = .698, \text{partial } \eta^2 = .110$) or at the Discover level ($F(1, 15) = .061, p = .808, \text{partial } \eta^2 = .310$). See Appendix N for full model outputs.

On track to graduate (credit-ready). Chi-square analyses were conducted to compare the difference in the proportion of STEP-UP interns and matched students who were on track to graduate in four years, based on whether or not they had earned the requisite number of credits for their grade. All expected cell frequencies were greater than five at both the Achieve and Discover levels. At the Achieve level, there was a statistically significant association between participation in STEP-UP and being on track to graduate on time. Achieve interns were more likely to be on track to graduate than matched students ($\chi^2(1) = 10.728, p = .001$). Cramer's $V = .153, p = .001$, shows a small effect size. At the Discover level, there was also a statistically significant association between participation in STEP-UP and being on track to graduate on time. Discover interns were more likely to be on track to graduate than matched students ($\chi^2(1) = 12.513, p < .001$). Cramer's $V = .181, p < .001$, shows a small effect size.

We also conducted a logistic regression to control for differences between student and matches on being on track to graduate in SY16. After controlling for being on track to graduate in SY16, there was a statistically significant difference between Achieve interns and their matches (Wald test statistic = 4.853, $df = 1$, $p = .028$) The odds of being credit ready in SY17 for Achieve interns were 2.7 times greater than the odds for matched students. Being an intern explained 47% of the variance (Nagelkerke R-Square = .467). There was also a significant difference for Discover interns (Wald test statistic = 3.801, $df = 1$, $p = .051$,). The odds of being credit ready in SY17 for Discover interns were 2.5 times greater than the odds for matched students. Being an intern explained 54% of the variance (Nagelkerke R-Square = .54). See Appendix N for full model outputs.

Graduation rates. A chi-square analysis was conducted to compare the difference in the proportion of STEP-UP interns and matched students who were in eleventh grade in SY2016 and received a diploma in SY2017. All expected cell frequencies were greater than five. Students who participated in STEP-UP were no more likely to graduate than matched students ($\chi^2 (1) = .017$, $p = .895$).

Tables 8, 9, 10, and 11 present a summary of the differences between interns and matched students for each of the school outcomes listed above.

Table 8

Comparison of Achieve Interns and Matched Students on GPA, Attendance, ACT Scores, MCA Reading Scores, MCA Math Scores, and Behavior

ACHIEVE	Group	N	Test Statistic	df	p	Effect size	Location of analysis in report
Grade Point Average: GPA*	Interns	270	9.391	1, 448	.002	0.021(eta squared)	p. 65
	Matched	181					
Attendance*	Interns	225	2.353		.0186	1.077 (odds ratio)	p. 66
	Matched	136					
ACT Composite Scores	Interns	110	.023	175	.981	X	p. 69
	Matched	67					
MCA Reading Scores	Interns	4	No analysis performed due to power considerations				p. 70
	Matched	3					
MCA Math Scores	Interns	34	.273	32.9	.787	X	p. 70
	Matched	19					
Behavior Referrals	Interns	8	U = 19 z =		.943	X	p. 68
	Matched	5					

			-233				
Suspensions	Interns	8	U = 33.5 z = -.796		.573	X	p. 69
	Matched	10					

*Analysis controlled for prior year's outcomes

Table 9

Comparison of Discover Interns and Matched Students on GPA, Attendance, ACT Scores, MCA Reading Scores, MCA Math Scores, and Behavior

DISCOVER	Group	N	Test Statistic	df	p	d	Location of analysis in report
Grade Point Average: GPA*	Interns	227	.038	1, 374	.845	X	p. 65
	Matched	153					
Attendance*	Interns	178	5.325		<.01	1.217 (odds ratio)	p. 66
	Matched	111					
ACT Composite Scores	Interns	32	-.832	51	.409	X	p. 69
	Matched	21					
MCA Reading Scores	Interns	67	.376	125	.708	X	p. 70
	Matched	60					
MCA Math Scores	Interns	8	-1.346	11.25	.205	X	p. 70

	Matched	10					
Behavior Referrals	Interns	18	U = 62 z = -.623		.605	X	p. 68
	Matched	8					
Suspensions	Interns	31	U = 108 z = - 1.541		.321	X	p. 69
	Matched	9					

*Analysis controlled for prior year's outcomes

Table 10

Comparison of Achieve Interns and Matched Students on Behavior Referrals, Removals, Suspensions, On-Track to Graduate, and Graduation Rates

ACHIEVE	N	χ^2	df	p	Cramer's V	Location of analysis in report
Behavioral Referrals	456	.03	1	.862	X	p. 68
Removals	456	.10	1	.75	X	p. 68
Suspensions	456	1.692	1	.193	X	p. 69
On-track to Graduate	456	10.782	1	.001	.153	p. 71
Graduation Rates	230	.017	1	.895	X	p. 71

X: Not included since $p > .05$

Table 11

Comparison of Achieve Interns and Matched Students on Behavior Referrals, Removals, Suspensions, On-Track to Graduate, and Graduation Rates

DISCOVER	N	χ^2	df	p	Cramer's V	Location of analysis in report
Behavioral Referrals	380	1.046	1	.306	X	p. 68
Removals	380	.26	1	.61	X	p. 68
Suspensions	380	5.865	1	.015	.124	p. 69
On-track to Graduate	380	12.513	1	<.001	.181	p.71
Graduation Rates		No analysis performed; not applicable at the Discover level				

X: Not included since $p > .05$

Post-Secondary Enrollment. A chi-square analysis was conducted to compare the difference in the proportion of STEP-UP interns and matched students in the 2014 and 2015 cohorts who enrolled in post-secondary programs. All expected cell frequencies were greater than five. Students who participated in STEP-UP were no more likely to enroll in a post-secondary program than matched students, 2014 cohort: ($\chi^2 (1) = 1.892, p = .169$) and 2015 cohort: ($\chi^2 (1) = .003, p = .955$).⁴⁴

Table 12 presents a summary of the differences between interns and matched students for each of the cohorts for post-secondary enrollment.

Table 12

Comparison of post-secondary enrollment data for participants and comparison students for 2014 and 2015 cohorts

	N	χ^2	df	p	Cramer's V	Location of analysis in report
2014 Cohort	450	1.892	1	.169	.065	p. 74
2015 Cohort	211	.003	1	.955	.004	p. 74

Social-Emotional Learning: Persistence. Of the five independent *t* tests conducted for the three cohorts, one showed statistically significant results. Discover interns from the 2016 cohort scored significantly higher on academic persistence than non-STEP-UP students. (Interns $N = 172, M = 4.07, SD = 0.69$) and matched students ($N = 123, M = 3.80, SD = 0.90; t(293) = -2.84, p = .005$). Cohen's $d = 0.34$ suggested a small effect. See Table 13 for details.

Table 13

SEL data for analysis conducted by REAA at Minneapolis Public Schools

	2014					2015					2016				
	STEP-UP		Non		t (df)	STEP-UP		Non		t (df)	STEP-UP		Non		t (df)
<i>n</i>	<i>M</i> (<i>SD</i>)	<i>n</i>	<i>M</i> (<i>SD</i>)	<i>N</i>		<i>M</i> (<i>SD</i>)	<i>n</i>	<i>M</i> (<i>SD</i>)	<i>n</i>		<i>M</i> (<i>SD</i>)	<i>n</i>	<i>M</i> (<i>SD</i>)	<i>n</i>	

⁴⁴ We conducted a sensitivity analysis using a multiple regression model that controlled for all variables in the original propensity score match. Results remained the same—there was no effect of program participation in postsecondary enrollment.

ACHIEVE	-	-	-	-	-	152	4.21 (.69)	139	4.11 (.75)	-1.17 (289)	340	4.11 (.75)	253	4.11 (.72)	.04 (296)
DISC.	-	-	-	-	-	148	4.00 (.72)	147	3.90 (.77)	-1.14 (293)	172	4.07 (0.69)	123	3.80 (.90)	-2.48* (293)
ALL	381	4.12	426	4.09	-.70 (1310)										

*p<.05

Effects

ACHIEVE

A **comparison of interns and matched (non-interns)** showed these **effects** in 2016:

- ✓ Grade Point Average (GPA)—small positive effect; GPAs decreased
- ✓ Attendance—minimal
- ✓ Being on track to graduate on time—small positive effect

The comparison showed **no effects** on the following outcomes in 2016:

- ✓ ACT Scores
- ✓ MCA Math Scores
- ✓ Likelihood to have behavioral referrals
- ✓ Number of behavioral referrals for those who had them
- ✓ Likelihood of removals from class
- ✓ Likelihood of suspension from school
- ✓ Number of suspensions for those who had them in the past

DISCOVER

A **comparison of interns and matched (non-interns)** for showed these **effects** in 2016:

- ✓ Attendance—minimal
- ✓ Being on track to graduate on time—small positive effect
- ✓ Likelihood of suspension from school—minimal (interns more likely than matched)

The comparison showed **no effects** on the following outcomes in 2016:

- ✓ Grade Point Average (GPA)
- ✓ ACT Scores
- ✓ MCA Math Scores
- ✓ MCA Reading Scores
- ✓ Likelihood to have behavioral referrals
- ✓ Number of behavioral referrals for those who had them
- ✓ Likelihood of removals from class
- ✓ Number of suspensions for those who had them in the past

Second design, preliminary evidence: one-group pretest-posttest within participants design.

School outcomes. Participants who completed internships in 2016 were compared with themselves on school outcomes. Because outcome data came from Minneapolis Public Schools (MPS), the analysis includes students who were enrolled in MPS in both 2015-16 and 2016-17. Outcomes examined in this analysis were GPA, attendance, behavior referrals, class removals, and suspensions. Because students do not take the same standardized tests every year, test scores could not be used for this analysis. In order to answer the evaluation questions, these analyses looked at Achieve and Discover students separately. It is important when interpreting these analyses that we not attribute causation to the program, whether the effects are positive or negative. Other factors (e.g., maturation, other experiences) may have contributed to the results.

GPA: Achieve. Using a paired-samples t test, we compared the 2015-16 GPAs with the 2016-17 GPAs for students who were Achieve interns in the summer of 2016. There was not a statistically significant difference between GPA in SY16 ($N = 270, M = 2.90, SD = .75$) and SY17, ($N = 270, M = 2.87, SD = .709$); $t(269) = .987, p = .325$, suggesting that completing an Achieve internship had no meaningful effect on GPA for Achieve interns.

GPA: Discover. Using a paired-samples t test, we compared the 2015-16 GPAs with the 2016-17 GPAs for students who were Discover interns in the summer of 2016. There was a statistically significant difference between GPA in SY16 and SY17, with the SY 17 average ($N = 227, M = 2.79, SD = .052$) lower than the SY16 average ($N = 227, M = 2.85, SD = .796$); $t(226) = 3.138, p = .002$. The mean difference in GPA (.0611) decreased from one school year to the next. Cohen's $d = 0.078$ suggested a minimal effect. It is possible that the difference can be attributed to the fact that these students moved to a higher grade-level and may have faced different standards for grading.

Attendance: Achieve. Using a paired-samples t test, we compared the 2015-16 percentage of school attendance with the 2016-17 attendance for students who were Achieve interns in the summer of 2016. There was a statistically significant difference between percentage attendance in SY16 and SY17, with the SY17 average ($N = 270, M = .93, SD = .08$) lower than the SY16 average ($N = 270, M = .95, SD = .07$); $t(269) = 3.94, p < .001$. Cohen's $d = 0.27$ suggested a small effect. It is noteworthy that these students attended school on average at rates at least 93% of the time. Without further research, we are not able to determine what is influencing decreased attendance from one year to the next.

Attendance: Discover. Using a paired-samples *t* test, we compared the 2015-16 percentage of school attendance with the 2016-17 attendance for students who were Discover interns in the summer of 2016. There was a statistically significant difference between percentage attendance in SY16 and SY17, with the SY17 average ($N = 227, M = .94, SD = .07$) lower than the SY16 average ($N = 227, M = .95, SD = .06$); $t(226) = 3.618, p < .001$. Cohen's $d = 0.15$ suggested a small effect. It is noteworthy that these students attended school on average at rates at least 93% of the time. Without further research, we are not able to determine what is influencing decreased attendance from one year to the next.

Behavior: referrals, removals, and suspensions. As shown in Figure 11, the data about Achieve and Discover interns show that the majority (and in some cases nearly all) of STEP-UP interns had no involvement with the disciplinary system in Minneapolis Public Schools. Even so, the percentage of Achieve interns with no referrals, removals or suspensions increased in SY17. Among Discover interns, there were fewer students with referrals and removals in SY17 compared to SY16, but the percentage of students with suspensions increased. Figures 12, 13, and 14 show comparisons on these outcomes between SY16 and SY17. Findings about changes in the number of referrals, removals, and suspensions should be considered in light of the larger finding that most STEP-UP interns had no disciplinary records.

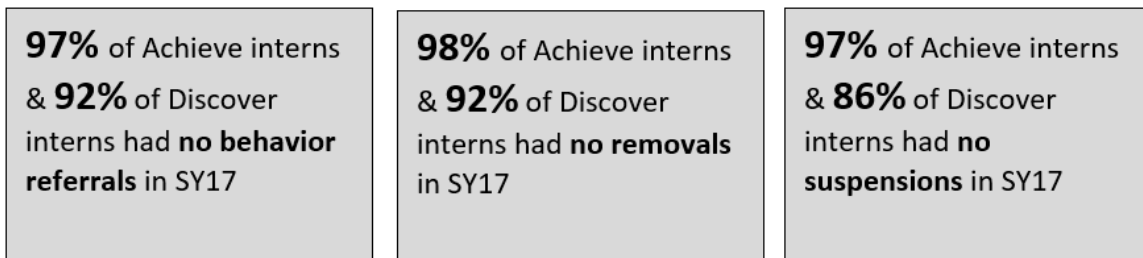


Figure 11. Involvement of STEP-UP Interns in the Minneapolis Public Schools Disciplinary System, SY17.

Behavior referrals: Achieve. Ninety percent of Achieve interns had no behavior referrals in the school year prior to the internship ($N = 270$). Following the 2016 internship, 97% of Achieve interns ($N = 270$) had no referrals. In 2015-16, the number of referrals per student ranged from 1 to 23 with the mean = 3.27, median = 1, and mode = 1 for those students who had them. In 2016-17 the number of referrals ranged from 1 to 5 with the mean = 1.5, median = 1, and mode = 1 for those students who had them. What is of interest here is that for students who had referrals in SY16 (26), 88% fewer had referrals the year after the internship.⁴⁵

⁴⁵ This does not account for the number of referrals, just the number of students who had them. There were 26 students with referrals in SY16 and of those, only 3 had referrals in SY17.

Behavior referrals: Discover. Eighty-six percent of Discover interns had no behavior referrals in the school year prior to the internship ($N = 227$). Following the 2016 internship, 92% of Discover interns ($N = 227$) had no referrals. In 2015-16, the number of referrals per student ranged from 1 to 58 with the mean = 7.32, median = 1, and mode = 1 for those students who had them. In 2016-17, the number of referrals ranged from 1 to 4 with the mean = 1.6, median = 1 and mode = 1 for those students who had them. For students who had referrals in SY16, 74% fewer had referrals the year after the internship.⁴⁶

Removals from class: Achieve. The overwhelming majority of Achieve interns had no removals during SY16 (97%, $N = 261$) or SY17 (98%, $N = 264$). In 2015-16, the number of removals per student ranged from 1 to 4, with the mean = 1.4 and the median = 1 and the mode = 1 for those students who had them. In 2016-17, the number of removals per student ranged from 1 to 5 with the mean = 1.7, median = 1, and mode = 1 for those students who had them. For students who had removals in SY16 ($N = 9$), none had removals in SY17. Six students who did not have removals in SY16 had them in SY17.

Removals from class: Discover. The vast majority of Discover interns had no removals in SY16 (91%, $N = 207$) or in SY17 (92%, $N = 209$). In 2015-16, the number of removals per student ranged from 1 to 3 with the mean = 1.3, median = 1 mode = 1 for those students who had them. In 2016-17, the number of students with removals ranged from 1 to 6 with the mean = 1.9, median = 1, and mode = 1 for those students who had them. For students who had removals in SY16, 65% fewer had referrals the year after the internship.⁴⁷ Fourteen students who did not have removals in SY16 had them in SY17, and four had the same number of removals in both years.

Suspensions: Achieve. Just as with removals, very few Achieve interns had suspensions in either SY16 (13%, $N = 262$) or in SY17 (3%, $N = 262$). In 2015-16, the number of suspensions per student ranged from 1 to 3 with the mean = 1.75, median = 1, and mode = 1 for those students who had them. In 2016-17, the number of suspensions ranged from 1 to 3 with the mean = 1.25, median = 1 and mode = 1 for those students who had them. For students who had suspensions in SY16 ($n = 8$), 7 had fewer suspensions the year after the internship and $\frac{3}{4}$ of them had no suspensions the following year. Six students who had no suspensions in SY16 had them in SY17. It is difficult to draw conclusions given the small numbers of students with suspensions.

Suspensions: Discover. More Discover interns had suspensions in SY17 (14%, $N = 31$) than in SY16 (8%, $N = 19$). In 2015-16, the number of suspensions per student ranged from 1 to 4

⁴⁶ This does not account for the number of referrals, just the number of students who had them. There were 31 students with referrals in SY16 and of those, only 8 had referrals in SY17.

⁴⁷ This does not account for the number of removals, just the number of students who had them. There were 20 students with removals in SY16 and of those, only 7 had removals in SY17.

with the mean = 1.5, median = 1, and mode =1 for those students who had them. In 2016-17, the number of suspensions ranged from 1 to 3 with the mean = 1.2 median = 1, and mode =1 for those students who had them. Twelve students had fewer suspensions in SY17 than in SY16, six had the same number, and 21 who had no suspensions in SY16 had them in SY17. For students who had suspensions in SY16, 47% fewer had suspensions the year after the internship.⁴⁸

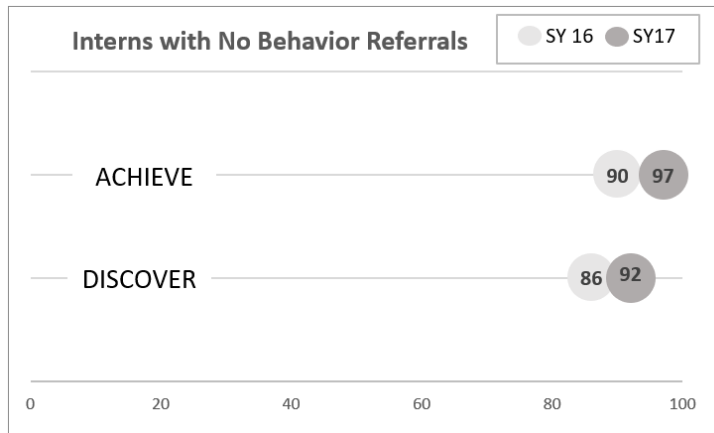


Figure 12: Percentages of Interns with NO Referrals in S16 and SY17.

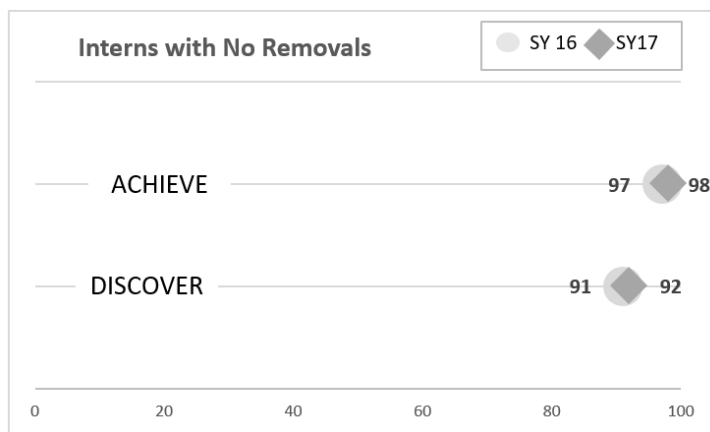


Figure 13: Percentages of Interns with NO Removals in SY16 and SY17.

⁴⁸ This does not account for the number of suspensions, just the number of students who had them. There were 19 students with referrals in SY16 and of those, 10 had suspensions in SY17.

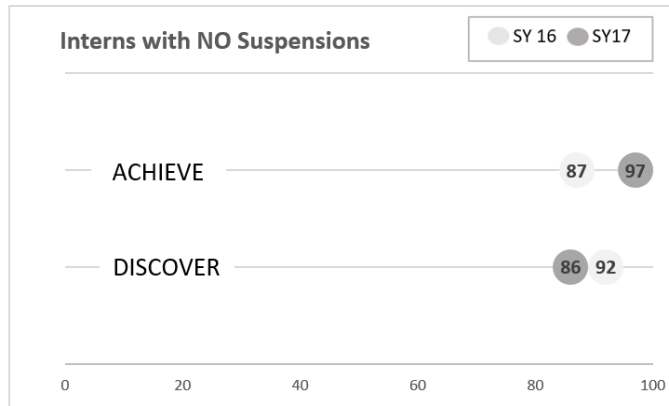


Figure 14: Percentages of Interns with NO Suspensions in SY16 and SY17.

Table 14 presents comparisons of interns between SY16 and SY17 for each of the school outcomes.

Table 14

Comparison of STEP-UP Interns' Outcomes Pre (School Year 2015-16) and Post (School Year 2016-17)

		Group	N	M	SD	t	df	p	d
ACHIEVE	Grade Point Average: GPA	Pre	270	2.90	.75	.987	269	.325	X
		Post	270	2.89	.709				
	Attendance	Pre	270	.95	.07	3.94	269	<.001	0.27
		Post	270	.93	.08				
DISCOVER	Grade Point Average: GPA	Pre	227	2.85	.796	3.138	226	.002	0.078
		Post	227	2.79	.052				
	Attendance	Pre	227	.95	.06	3.618	226	<.001	0.15
		Post	227	.94	.07				

Employability outcomes. Employability outcomes included attitude, occupational or professional knowledge, future orientation, 21st Century skills such as teamwork and communication, and professional networks. Data were taken from surveys completed by students before training and in the end-of-summer survey. The difference scores were symmetrically distributed as assessed by a histogram. A Wilcoxon signed-rank test found statistically significant differences in median scores from pre- to post using the Wilcoxon signed-rank test on 7 items among Achieve interns and on 7 items among Discover interns. Of these, the two items about interview preparedness and the one about naming people to ask for references had statistically significant differences in median scores for *both* Achieve and Discover interns. A table of analyses by question, including effect sizes, can be found in Appendix O.

Findings. For Achieve interns there were *small* effects for the following from pre- to post:

- Staying calm under stress
- Accepting criticism openly
- Actively looking for additional tasks when my own work is done
- Breaking problems into smaller parts to solve them⁴⁹
- Knowing what questions to expect in a job interview
- Knowing what questions to ask in a job interview
- Naming two or more people to ask for references⁵⁰

For Discover interns there were *small* effects for the following from pre- to post:

- Knowing what clothes to wear to work
- Oral communication in a professional setting
- Written communication in a professional setting
- Describing skills and strengths on a professional resume⁵¹
- Knowing what questions are appropriate to ask during a job interview
- Naming two or more people to ask for references

For Discover interns there was a *medium* effect on the following from pre- to post:

- Knowing what questions to expect in a job interview

The analyses of the employability items showed a few items with higher scores prior to training than scores after the internship on the Wilcoxon signed rank test. For Achieve level students, two items were related to future orientation (“I intend to continue my education following high school” and “I am hopeful about my future”) and one was about perceptions of self (“I bring energy and enthusiasm to tasks”). For Discover, students scored higher on items about future orientation (“I am hopeful about my future”) and perceptions of self (“I bring energy and enthusiasm to tasks”) prior to training. For those items we looked at the frequencies of each of the responses. In all cases, the proportion of respondents who selected “agree or strongly agree” were high both before and after. This suggests that there was not much room for change over the course of the training and internship; they had already reached a ceiling. See Appendix O.

⁴⁹ After correcting for multiple comparisons, there were not statistically significant differences pre to post on this item. See Appendix O for details.

⁵⁰ After correcting for multiple comparisons, there were not statistically significant differences pre to post on this item. See Appendix O for details.

⁵¹ After correcting for multiple comparisons, there were not statistically significant differences pre to post on this item. See Appendix O for details.

Exploratory Questions on Different Experiences & School Outcomes: Number of Hours.

Number of hours per week⁵² worked and GPA changes from SY16 to SY17. Using a one-way ANOVA, we compared the differences in GPA in SY17 and SY16 for 2016 Achieve interns grouped by the range of hours per week they worked. There were no statistically significant differences in GPA change among the groups of interns who worked different numbers of hours, $F(5, 148) = 1.159, p = .332$. Given that there were outliers and the normality assumption was violated for one of the groups, a nonparametric test (Kruskal-Wallis) was also run. There were not significant differences between interns who worked different numbers of hours and change in GPA, $\chi^2(5) = 3.461, p = .629$. This analysis indicates that the number of hours worked per week was not related to a change in GPA from the school year before to the school year after the internship for Achieve interns.

Number of hours per week worked and ACT scores. ACT scores were available for 63 students in our data set. Using a one-way ANOVA, we compared ACT scores for interns grouped by the range of hours per week they worked. There were not statistically significant differences in ACT scores among the groups of interns who worked different numbers of hours, $F(5, 57) = .914, p = .479$. Given that there were outliers and the normality assumption was violated for one of the groups, a nonparametric test (Kruskal-Wallis) was also run. There were not significant differences in ACT scored based on number of hours worked $\chi^2(5) = 5.119, p = .402$.

Number of hours per week worked and MCA Math scores. MCA Math scores were available for 18 interns in our data set. Using a one-way ANOVA, we compared MCA math scores for interns grouped by the range of hours per week they worked. There were no statistically significant differences in MCA Math scores among the groups of interns who worked different numbers of hours, $F(5, 12) = .663, p = .658$. Because of small number of interns in some of the groups, a nonparametric test (Kruskal-Wallis) was also run. There were not significant differences among the groups, $\chi^2(5) = 3.608, p = .607$. We should be cautious about drawing conclusions about this outcome given the small number of cases for which we had data and the number in each group.

Number of hours per week and change in rate of attendance. Using a one-way ANOVA, we compared the differences in rate of attendance in SY17 and SY16 for 2016 Achieve interns grouped by the range of hours per week they worked. There were no statistically significant differences in rate of attendance among the groups of interns who worked different numbers of hours, $F(5, 148) = .400, p = .848$. Given that there were outliers and the normality assumption was violated for several of the groups, a nonparametric test (Kruskal-Wallis) was also run. There were not significant differences between groups for difference in the rate of attendance between

⁵² Groups were less than 10 hours, 10-15 hours, 16-25 hours, 26-34 hours, 35-40 hours, more than 40 hours.

SY16 and SY17, $\chi^2(5) = 3.367, p = .644$. This analysis indicates that the number of hours per week worked was not related to a change in rate of attendance from the school year before to the school year after the internship for Achieve interns.

These analyses indicate that the number of hours per week worked was not related to changes in changes in GPA or rate of attendance from one school year to the next. Number of hours per week work was also not related to differences in ACT scores or MCA math scores for Achieve interns. Table 15 presents a summary of the analyses of school outcomes for interns who worked different numbers of hours per week.

Table 15

Analyses of School Outcomes for Interns Who Worked Different Numbers of Hours per Week

HOURS PER WEEK WORKED	Group	N	Test	df	p	Test	df	p	Page in report
			Statistic	ANOVA			Nonparametric: Kruskal-Wallis		
Change in Grade Point Average: GPA	<10	9	1.159	5,148	.332	3.461	5	.629	p. 83
	10-15	28							
	16-25	38							
	26-34	25							
	35-40	48							
	> 40	6							
ACT Scores	<10	1	.914	5,57	.479	5.119	5	.402	p. 83
	10-15	11							
	16-25	12							
	26-34	12							
	35-40	23							
	> 40	4							
MCA Math Scores	<10	1	.663	5,12	.658	3.608	5	.607	p. 83
	10-15	2							
	16-25	3							
	26-34	2							
	35-40	8							
	> 40	2							

HOURS PER WEEK WORKED	Group	N	Test Statistic	df	p	Test Statistic	df	p	Page in report
Change in Percentage Attendance	<10	9	.400	5,148	.848	3.367	5	.644	p. 83
	10-15	28							
	16-25	38							
	26-34	25							
	35-40	48							
	> 40	6							

Exploratory Questions on Different Experiences & School Outcomes: Number of Weeks.

Number of weeks⁵³ worked and GPA changes from SY16 to SY17. Using a one-way ANOVA, we compared the differences in GPA in SY17 and SY16 for 2016 Achieve interns grouped by the number of weeks they worked. There were no statistically significant differences in GPA change among the groups of interns who worked different numbers of weeks, $F(5, 146) = .262, p = .968$. Given that there were outliers and the normality assumption was violated for one of the groups, a nonparametric test (Kruskal-Wallis) was also run. There were not significant differences between groups of number of hours worked and change in GPA, $\chi^2(7) = 1.797, p = .970$. This analysis indicates that the number of weeks worked was not related to a change in GPA from the school year before to the school year after the internship for Achieve interns.

Number of weeks worked and ACT scores. ACT scores were available for 63 students in our data set. Using a one-way ANOVA, we compared ACT scores for interns grouped by the number of weeks they worked they worked. There were no statistically significant differences in ACT scores among the groups of interns who worked different numbers of weeks, Welch's $F(6, 9.081) = 1.10, p = .430$.

Number of weeks worked and MCA Math scores. MCA Math scores were available for 18 interns in our data set. Using a one-way ANOVA, we compared MCA math scores for interns grouped by the number of weeks they worked. There were no statistically significant differences in MCA Math scores among the groups of interns who worked different numbers of hours, $F(4,13) = 1.321, p = .313$. Because of small number of interns in some of the groups, a

⁵³ Groups were 5 weeks, 6 weeks, 7 weeks, 8 weeks, 9 weeks, 10 weeks and more than 10 weeks.

nonparametric test (Kruskal-Wallis) was also run. There were not significant differences among the groups, $\chi^2(4) = 4.368, p = .358$. We should be cautious about drawing conclusions about this outcome given the small number of cases for which we had data and the number in each group.

Number of weeks worked and change in rate of attendance. Using a one-way ANOVA, we compared the differences in rate of attendance in SY17 and SY16 for 2016 Achieve interns grouped by the range of weeks they worked. There were no statistically significant differences in rate of attendance among the groups of interns who worked different numbers of weeks, $F(7, 146) = .429, p = .883$. Given that there were outliers and the normality assumption was violated for several of the groups, a nonparametric test (Kruskal-Wallis) was also run. There were not significant differences between groups for difference in the rate of attendance between SY16 and SY17, $\chi^2(7) = 6.136, p = .524$. This analysis indicates that the number of weeks worked was not related to a change in rate of attendance from the school year before to the school year after the internship for Achieve interns.

These analyses indicate that the number of weeks worked was not related to changes in GPA or rate of attendance from one school year to the next. The number of weeks worked was also unrelated to either ACT scores or MCA math scores for Achieve interns. Table 16 presents a summary of the analyses of school outcomes for interns who worked different numbers of weeks.

Table 16

Analyses of School Outcomes for Interns that Worked Different Numbers of Weeks

WEEKS WORKED	Group	N	Test Statistic	df	p	Test Statistic	df	p	Page in report
			ANOVA			Nonparametric: Kruskal-Wallis			
Change in Grade Point Average: GPA	4	5	.262	5,146	.968	1.797	7	.970	p. 85
	5	4							
	6	19							
	7	11							
	8	20							
	9	65							
	10	17							
>10	13								
ACT Scores	4	0	1.10	6,9.081	.430				p. 85
	5	2							
	6	5							
	7	6							
	8	6							
	9	29							

WEEKS WORKED	Group	N	Test Statistic	df	p	Test Statistic	df	p	Page in report
			ANOVA			Nonparametric: Kruskal-Wallis			
	10	10							
	>10	5							
MCA Math Scores	4	0	1.321	4,13	.313	4.368	4	.358	p. 85
	5	0							
	6	2							
	7	0							
	8	2							
	9	9							
	10	4							
	>10	1							
Change in Percentage Attendance	4	5	.429	7,146	.883	6.136	7	.524	p. 86
	5	4							
	6	19							
	7	11							
	8	20							
	9	65							
	10	17							
	>10	13							

Exploratory questions on different experiences & school outcomes: number of internships.

Single or multiple STEP-UP internship⁵⁴ and GPA. An independent-samples *t* test was conducted to compare differences in GPA between SY16 and SY17 for STEP-UP Achieve interns who completed an internship in 2016 only and interns with at least one other summer STEP-UP internship. For Achieve, there was not a significant difference in the scores for single year interns ($N = 137, M = -.0113, SD = .156$), and multiple year interns ($N = 97, M = .0047, SD = .164$), $t(232) = -.759, p = .449$. Because of violations of test assumptions, a nonparametric test (Mann Whitney) was also run and there were not significant differences between the two groups on differences in GPA, $U = 7,007, z = .711, p = .477$.

For Discover interns there was not a significant difference in the scores for single year interns ($N = 153, M = -.0813, SD = .250$), and multiple year interns ($N = 33, M = -.0821, SD = .278$), $t(184) = .071, p = .987$. Because of violations of test assumptions, a nonparametric test (Mann Whitney)

⁵⁴ Groups were based on whether a student had an internship only in 2016 or in 2016 plus 2014 and/or 2015.

was also run and there were not significant differences between the two groups on differences in GPA, $U = 3.224$, $z = .494$, $p = .621$.

This analysis indicates that doing more than one STEP-UP internship was not related to a change in GPA for Achieve or Discover interns.

Single or multiple STEP-UP internships and ACT scores. An independent-samples t test was conducted to compare ACT test scores of STEP-UP Achieve interns who completed an internship in 2016 only and interns with at least one other summer STEP-UP internship. For Achieve, there was not a significant difference in the scores for single year interns ($N = 61$, $M = 17.05$, $SD = 5.503$), and multiple year interns ($N = 40$, $M = 16.95$, $SD = 4.489$), $t(99) = .095$, $p = .924$. Because of violations of test assumptions, a nonparametric test (Mann Whitney) was also run and there were not significant differences between the two groups on ACT scores, $U = 1,248.5$, $z = .199$, $p = .842$.

An independent-samples t test was conducted to compare ACT test scores of STEP-UP interns who completed a Discover internship in 2016 only and interns with at least one other summer STEP-UP internship. For Discover there was not a significant difference in the scores for single year interns ($N = 17$, $M = 15.65$, $SD = 5.408$), and multiple year interns ($N = 5$, $M = 15.80$, $SD = 3.033$), $t(20) = -.060$, $p = .953$. Because of violations of test assumptions, a nonparametric test (Mann Whitney) was also run and there were not significant differences between the two groups on ACT scores, $U = 49.0$, $z = .514$, $p = .649$. At the Discover level, we had a small number of cases and results should be interpreted with caution. These results suggest doing more than one STEP-UP internship did not influence ACT scores.

Single or multiple STEP-UP internships and MCA Math scores. An independent-samples t test was conducted to compare MCA math test scores of STEP-UP interns who completed an internship in 2016 only and interns with at least one other summer STEP-UP internship. For Achieve there was not a significant difference in the scores for single year interns ($N = 20$, $M = 1131.75$, $SD = 16.157$), and multiple year interns ($N = 8$, $M = 1125.50$, $SD = 9.15$), $t(26) = 1.023$, $p = .316$. At the Discover level we did not have data for enough students to run the analysis. These results suggest doing more than one STEP-UP internship did not influence MCA Math scores. Caution should be taken, though, in interpreting these results given the small number of multiple year interns.

Single or multiple STEP-UP internships and MCA Reading scores. An independent-samples t test was conducted to compare MCA reading test scores of STEP-UP interns who completed an internship in 2016 only and interns with at least one other summer STEP-UP internship. For Discover there was not a significant difference in the scores for single year interns

($N = 49$, $M = 1038.06$, $SD = 18.1$ and multiple year interns ($N = 5$, $M = 1038.6$, $SD = 15.978$), $t(52) = -.064$, $p = .949$. At the Achieve level we did not have data for enough students to run the analysis. These results suggest doing more than one STEP-UP internship did not influence MCA Reading scores. Caution should be taken, though, in interpreting these results given the small number of multiple year interns.

Single or multiple STEP-UP internships and change in attendance. An independent-samples t test was conducted to compare differences in attendance rates between SY16 and SY17 for STEP-UP Achieve interns who completed an internship in 2016 only and interns with at least one other summer STEP-UP internship. For Achieve, there was not a significant difference in the scores for single year interns ($N = 137$, $M = -.0138$, $SD = .057$), and multiple year interns ($N = 97$, $M = -.02$, $SD = .055$), $t(232) = .836$, $p = .404$. Because of violations of test assumptions, a nonparametric test (Mann Whitney) was also run and there were not significant differences between the two groups on differences in GPA, $U = 5,980$, $z = -1.303$, $p = .193$.

For Discover interns there was not a significant difference in the scores for single year interns ($N = 153$, $M = -.0158$, $SD = .059$), and multiple year interns ($N = 33$, $M = -.0218$, $SD = .059$), $t(184) = .536$, $p = .593$. Because of violations of test assumptions, a nonparametric test (Mann Whitney) was also run and there were not significant differences between the two groups on differences in GPA, $U = 2,316.5$, $z = -.742$, $p = .458$. This analysis indicates that doing an internship more than once was not related to a change in rate of attendance from the school year before to the school year after the internship for Achieve or Discover interns.

Overall, the analyses indicate that doing an internship for more than one summer was not related to changes in GPA or rate of attendance from the school year before to the school year after the internship, ACT scores, or MCA scores for Achieve or Discover interns. Results for all school outcomes are presented in Tables 17 and 18.

Table 17

Analyses of School Outcomes for Achieve Interns Who Had 1 Internship or More Than 1 Internship

ACHIEVE	Group: Years of internships	N	Test	df	p	Test	df	p	Page in report
			Statistic	Independent samples t test			Mann Whitney test		
GPA	1	137	-.759	232	.449	.711		.477	p. 87
	>1	97							
ACT	1	61	.095	99	.924	.199		.842	p. 88
	>1	40							
MCA Math	1	20	1.023	26	.316				p. 88
	>1	8							
Change in % of	1	137	.836	232	.404	-1.303		.193	p. 89

Attendance	>1	97							
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Table 18

Analyses of School Outcomes for Discover Interns Who Had 1 Internship or More Than 1 Internship

DISCOVER	Group: Years of internships	N	Test	df	p	Test	df	p	Page in report
			Statistic	Independent samples t test			Mann Whitney test		
GPA	1	153	.071	184	.987	.494		.621	p. 83
	>1	33							
ACT	1	17	-.060	20	.953	U = 49 z = .514		.649	p. 83
	>1	5							
MCA Reading	1	49	-.064	52	.949				p. 84
	>1	5							
Change in % of Attendance	1	153	.536	184	.593	-.742		.458	p. 84
	>1	33							

Exploratory questions on different experiences & employability outcomes: number of hours.

A Kruskal-Wallis H test was run to determine if changes in employability self-ratings (decrease, same, increase) differed among six groups of participants who worked different numbers of hours per week during the summer. There was one employability item (“I get my work done on time”) with statistically significant differences in mean ranks⁵⁵ of changes in self-ratings, $\chi^2(5) = 12.231$, $p = .032$. The results for that employability item are shown in Table 19 for groups that worked different numbers of hours. We compared the groups that had at least 10 people and found the group with the largest proportion reporting an increase pre- to post on this item worked 16-25 hours/week during the summer. It is difficult to say why that would be the case.

Table 19

Analysis of Employability Item with Statistical Significance for Interns that Worked Different Number of Hours per Week

Item	Group: Number of Hours	N	Mean Rank	Test Statistic	df	p
Q12. I get my work done on time.	<10	8	66.50	12.231	5	.032
	10-15	22	63.84			
	16-25	36	80.50			
	26-34	24	62.08			

⁵⁵ Distribution of scores was not similar for all groups as assessed by visual inspection of a boxplot.

	35-40	35	52.57			
	> 40	5	70.10			

Exploratory questions on different experiences & employability outcomes: number of weeks. A Kruskal-Wallis H test was run to determine if changes in employability self-ratings (decrease, same, increase) among eight groups of participants who worked different numbers of weeks during the summer (4, 5, 6, 7, 8, 9, 10, more than 10) differed. There was one employability item (“I know the education required for the work I am interested in doing”) where the mean ranks⁵⁶ of changes in self-ratings was statistically significant, $\chi^2(7) = 14.926, p = .037$. The results are shown in Table 20 shows results for that employability item for groups of participants who worked different numbers of weeks. We compared the groups that had at least 10 people and found the group with the largest proportion reporting an increase pre- to post on this item worked 8 weeks during the summer. It is difficult to say why that would be the case.

Table 20

Analysis of Employability Item with Statistical Significance for Interns Who Worked Different Number of Weeks

Item	Group: Number of Weeks	N	Test Statistic	df	p
Q25. I know the education required for the work I am interested in doing.	4	5	14.926	7	.037
	5	3			
	6	16			
	7	6			
	8	17			
	9	55			
	10	10			
	>10	12			

Exploratory questions on different experiences & employability outcomes: number of internships. Two sets of Chi square tests (one for Achieve, one for Discover) were run to determine if changes in employability self-ratings (decrease, same, increase) between two groups of participants who had either one internship in 2016 or an internship in 2016 plus one in 2014 and/or 2015 differed.

For Achieve interns, there were statistically significant associations between number of internships (1, more than 1) and changes in employability self-ratings for four items. Results are summarized in Table 21.

⁵⁶ Distribution of scores was not similar for all groups as assessed by visual inspection of a boxplot.

A larger proportion of the multiple internships group (27% vs. 8%) reported an increase pre- to post on actively looking for additional tasks after completing their own work ($\chi^2(2) = 8.676, p = .013$). Of the one-year interns, 60% (57) decreased their self-rating on this item from pre-to post. It is possible to imagine that after the first STEP-UP internship experience, interns got more realistic or honest about their own tendencies, or the internship gave them context in which to test themselves. It is possible that with added experience, interns felt more comfortable or placed greater value on taking the initiative to do more than assigned. See Appendix P for details.

A larger proportion of the multiple internship group (33% vs. 21%) reported an increase pre- to post on thinking about several possible solutions to a problem ($\chi^2(2) = 6.6465, p = .039$). Close to half of both groups decreased their self-ratings pre- to post. Any internship experience may have helped youth assess themselves more realistically. It is also possible that with increasing experience, interns learned additional problem-solving skills.

A larger proportion of the multiple internship group (27% vs. 17%) reported an increase pre- to post on thinking about arriving on time ($\chi^2(2) = 7.693, p = .021$). More than half of both groups decreased their self-ratings pre- to post. Any internship experience may have helped youth assess themselves more realistically. It is also possible that with increasing experience, interns improved their promptness.

A larger proportion of the multiple internship group (27% vs. 18%) reported an increase pre- to post on knowing what questions to expect in a job interview ($\chi^2(2) = 6.20, p = .045$). It is possible that with more experience with interviews interns become more familiar with the interview process and what to expect from it.

Table 21

Analysis of Employability Items with Statistical Significance for Achieve Interns that Had 1 Internship or More Than 1 Internship

Item	Group: Internships	N	χ^2	df	p
Q6. I actively look for additional tasks when my own work in done.	1	95	8.676	2	.013
	>1	44			
Q9. I think of several possible solutions to a problem.	1	95	6.465	2	.039
	>1	42			
Q13. I arrive on time.	1	94	7.693	2	.021
	>1	44			
Q19 I know what questions to expect in a job interview.	1	95	6.200	2	.045
	>1	44			

Table 22

Analysis of Employability Items with Statistical Significance for Discover Interns Who Had 1 Internship or More Than 1 Internship.

Item	Group: Internships	N	χ^2	df	p
Q19. I know what questions to expect in a job interview.	1	96	7.182*	2	.028
	>1	16			
Q20. I know what questions are appropriate for me to ask during a job interview.	1	97	10.866*	2	.004
	>1	16			

*One cell had expected count less than 5

For Discover interns, there were statistically significant associations between number of internships (1, more than 1) and changes in employability self-ratings for two items. Caution should be taken in interpreting these results given the small size of the group with more than one internship ($N = 16$). Results are summarized in Table 22.

A larger proportion of the single STEP-UP internship group (54% vs. 19%) reported an increase pre- to post on knowing what questions to expect in a job interview ($\chi^2(2) = 7.182, p = .028$). It is possible that the first-time interns are exposed to training about interviews, it is new information and they learn a great deal; subsequent exposure may add to their knowledge but not to the same extent. This finding runs counter to the finding among Achieve interns.

A larger proportion of the single internship group (41% vs. 6%) reported an increase pre- to post on knowing what questions are appropriate to ask during a job interview. ($\chi^2(2) = 10.866, p = .004$). It is possible that the first-time interns are exposed to training about interviews, it is new information and they learn a great deal; subsequent exposure may add to their knowledge but not to the same extent.

Summary of Findings

The following sections are a summary of the findings for each evaluation question addressed in the study.

Impact Evaluation Questions: Confirmatory

1. Does the STEP-UP summer jobs program improve school outcomes?

a. Do the Achieve participants achieve better school outcomes than comparison group students?

STEP-UP Achieve participants had better GPAs than comparison group students even when controlling for differences the year prior to the internship, but both intern and matched student GPA decreased from one school year to the next. The effect size was small. They were more likely to be on-track to graduate on time (completing sufficient credits each year) even when controlling for prior achievement. Participants were slightly more likely to have a better rate of attendance in SY17 than comparison students (minimal effect size), but overall attendance rates dropped for both groups from one year to the next. Results should be interpreted in light of attendance rates for both groups in both years being at 91% or above. There were no effects on test scores (GPA, MCA Math). There were no effects on behavior outcomes even when controlling for prior achievement; results need to be interpreted in light of the small proportions of participants and matched students who had any behavioral incidents—referrals, removals, or suspensions.

These results are similar to, but not the same as, those reported in the 2015 interim impact report. That year there were differences only in participants' likelihood to be on track to graduate compared to matched students. There were no differences for GPA or attendance.

b. Do the Discover participants achieve better school outcomes than comparison group students?

STEP-UP Discover participants were more likely to be on track to graduate than matched students. Participants were slightly more likely to have a better rate of attendance in SY17 than comparison students (minimal effect size), but overall attendance rates dropped for both groups. Results should be interpreted in light of attendance rates for both groups in both years being at 92% or above. For Discover students, there were no effects on GPA, ACT scores, MCA Math scores, or MCA reading scores. With the exception of likelihood of suspension, there were no effects on behavior outcomes; results need to be interpreted in

light of the small proportions of participants and matched students who had any behavior incidents. Discover interns were more likely to have suspensions, but the effect size was minimal.

These results are similar to, but not the same as, those found in 2015. That year there were no differences in any school outcomes for the Discover level.

- c. Do STEP-UP participants have higher postsecondary enrollment than the comparison group?

There were no differences in postsecondary enrollment rates between participants and comparison students for the 2014 and 2015 cohorts.

Impact Evaluation Questions: Exploratory

1. Does the STEP-UP summer jobs program improve school outcomes?

- a. Do the Achieve participants achieve better school outcomes pre- to post-program?

A comparison in Achieve interns' outcomes before and after the 2016 internship showed no effect on GPA and a small negative effect on attendance. Further research is needed to determine why attendance went down from one year to the next, but the average both years was over 91%. Results were similar to those of 2015 when there were minimal negative changes in GPA and attendance. GPA may have gone down as a result of increasing demands in higher grades.

The majority (and in some categories nearly all) of STEP-UP Achieve interns had no involvement in the disciplinary system in Minneapolis Public Schools. Even so, the percentage of Achieve interns with no referrals, removals, or suspensions increased in SY17 compared to SY16. The results for behavior outcomes are similar to those in 2015.

- b. Do the Discover students achieve better school outcomes pre- to post-program?

A comparison of Discover interns' outcomes before and after the 2016 internship showed a minimal negative effect on GPA and a small negative effect on attendance. Without further research it is impossible to say why attendance went down from one year to the next, but the average both years was over 94%. GPA may have gone down as a result of increasing demands in higher grades. Results were similar to 2015, but the effect size for GPA was slightly larger that year.

The majority of Discover interns had no involvement with the disciplinary system in Minneapolis Public Schools. Among Discover interns, there were fewer students with

referrals and removals in SY17 compared to SY16, but the percentage of students with suspensions increased. With the exception of suspension results, the results for behavior outcomes in 2016 are similar to those for 2015.

2. Does the STEP-UP summer jobs program improve employability outcomes?

In 2016, both Achieve and Discover interns improved in job-related skills: knowing what questions to ask in an interview, what questions to expect in an interview, and identifying people to use as professional references.⁵⁷ These outcomes were consistent with the results of 2015.

a. Do the Achieve participants achieve better employability outcomes pre- to post-program?

In addition to the skills mentioned above, in 2016, Achieve interns showed positive changes in their self-assessments of other personal skills: staying calm under stress, accepting criticism, looking for additional tasks when work is complete, and breaking problems into small parts to solve them.⁵⁸ We were not able to compare their ratings with those of their supervisors to see if those perceptions were aligned.

b. Do the Discover participants achieve better employability outcomes pre- to post-program?

In addition to the skills mentioned above, in 2016, Discover interns showed positive changes in their self-assessments of other employment skills: knowing what clothes to wear to work, oral and written communication in a professional setting, and creating a professional resume.⁵⁹

3. Do differential experiences in the STEP-UP summer job program – internship length or longitudinal experience– lead to differential outcomes on school and employability measures?

a. Do students who work longer work weeks and/or more weeks in the program have better outcomes?

The number of hours per week worked was not related to changes in GPA or rate of attendance from the school year before to the school year after the internship, ACT scores, or MCA math scores for Achieve interns.

⁵⁷ After correcting for multiple comparisons, the difference on naming references was not statistically significant from pre to post.

⁵⁸ The difference on breaking problems into small parts to solve them was not statistically significant after correcting for multiple comparisons.

⁵⁹ After correcting for multiple comparisons there was not a statistically significant difference pre to post on resume writing.

Interns who worked more hours did not have better employability outcomes.

The number of weeks worked was not related to changes in GPA or rate of attendance from the school year before to the school year after the internship, ACT scores, or MCA math scores for Achieve interns.

Interns who worked more weeks did not have better employability outcomes.

b. Do students who work for STEP-UP multiple years in a row have better outcomes?

Doing an internship for more than one summer was not related to changes in GPA or rate of attendance from the school year before to the school year after the internship, ACT scores, or MCA scores for Achieve or Discover interns.

Achieve interns with more than one STEP-UP internship experience had better outcomes on:

- Looking for additional tasks after completing assigned work
- Thinking of multiple solutions to a problem
- Arriving on time
- Knowing what questions to expect in a job interview

Discover interns with more than one STEP-UP internship experience had better outcomes on:

- Knowing what questions to expect in a job interview
- Knowing what questions to ask during a job interview

Interpretations and Limitations

Confirmatory Study Results Targeting Moderate Level of Evidence: School Outcomes

Focusing on 2016 participants and a comparison group, this confirmatory impact study sought moderate evidence to answer the question, “Does the STEP-UP summer jobs program improve school outcomes?” The study yielded results on school outcomes similar to those of previous years—there were limited positive effects of STEP-UP on school outcomes.

Summary of findings. At the Achieve level, there were no effects on ACT or MCA scores, the likelihood or number of behavioral referrals, the likelihood of removals, the likelihood or number of suspensions even when controlling for prior achievement. Attendance rates for both groups also declined, but interns’ attendance rates were marginally better. Grade point average for both interns and the comparison group declined on average, but interns had higher GPAs even when controlling for differences the prior year. Achieve interns were more likely than matched students to have the credits needed to graduate in four years even when controlling for prior achievement. These results may indicate that stronger students applied to and participated in STEP-UP at the Achieve level.

At the Discover level, we also saw limited improvements in school outcomes in the confirmatory study. There were no effects of the STEP-UP program on GPA, ACT scores, MCA scores, likelihood or number of behavioral referrals, the likelihood of removals from class, or the number of suspensions. Attendance rates for both interns and matched students declined, but interns’ rates of attendance were marginally better. Discover interns were actually *more* likely than their peers to be suspended. The results were the same even when we controlled for prior achievement.

Results for both Achieve and Discover were similar to but not exactly the same as those found in 2015. That year there were differences only in Achieve participants’ likelihood to be on track to graduate compared to matched students. On post-secondary enrollment, there were no differences between participants and matched students in the 2014 nor the 2015 cohorts.

Interpretation of findings. One possible explanation for these results is that STEP-UP does not specifically target school-related skills in its trainings or internships. Using school outcomes, then, may be neither a desirable nor a realistic way of measuring the impact of the program on its participants. If changes in school-related metrics were the goal of the program, these school outcomes would need to be targeted more explicitly through programming.

Limitations: School outcomes. The comparisons showed small negative effects on GPA and attendance. Without further research it is impossible to say why these decreased from one

year to the next, but the changes could be related to school transitions and increasing difficulty of coursework in higher grades. Outcomes on attendance should be interpreted in light of the larger finding that rates of attendance for both interns and comparison students before and after the internship summer were above 90%. The data about Achieve and Discover interns and matched students show that the majority (and in some cases nearly all) had no involvement with the disciplinary system in Minneapolis Public Schools. The analyses about likelihood of having referrals, removals, and suspensions and those about changes in the number of referrals, removals, and suspensions were performed on small subsets of each of the groups. Some analyses could not be conducted due to the small sample size. While some results were promising, the small number of cases relative to the entire group of interns calls for caution in interpreting them and must be interpreted in light of the larger finding that most STEP-UP interns and their matches did not have disciplinary incidents.

There are limitations to the generalizability of these findings. Many interns in the program were not enrolled in Minneapolis Public Schools or were not enrolled both before and after the internship. Since we only had school data for MPS students, results should not be generalized to program participants in other school districts nor to other youth employment programs.

Exploratory Study Results Targeting Preliminary Level of Evidence: School Outcomes

Summary of findings. The exploratory impact study sought preliminary evidence about whether interns achieved better school outcomes pre- to post-program. In both 2015 and 2016 at the Achieve and Discover levels, interns did not achieve better GPAs nor attendance rates; in fact, students declined on these measures. In the area of behavior outcomes, as shown in Table 23, most interns were not involved with the disciplinary system either before or after the internship, though in almost all categories a higher percentage avoided the disciplinary system the year following the internship than the year before. Of those students who had behavior incidents in the year prior to the internship, many had none the year after.⁶⁰ In contrast, there were students who did not have incidents in the year prior to the internship and *did* have them in the year after. The exploratory analyses examining differences for interns who had an internship more than one year, who worked more hours per week, or more weeks per year showed no differences in school outcomes (GPA, attendance, ACT scores, MCA scores).

⁶⁰ At the Achieve level, of students with referrals in SY15, 66% fewer had them in SY16; of students with referrals in SY16, 88% fewer had them in SY17. Of students with removals in SY15, 68% fewer had them in SY16; of students with removals in SY16, 100% fewer had them in SY17. Of students with suspension in SY15, 79% fewer had them in SY16; of students with suspensions in SY16, 75% fewer had them in SY17.

At the Discover level, of students with referrals in SY15, 68% fewer had them in SY16; of students with referrals in SY16, 74% fewer had them in SY17. Of students with removals in SY15, 82% fewer had them in SY16; of students with removals in SY16, 65% fewer had them in SY17. Of students with suspension in SY15, 59% fewer had them in SY16; of students with suspensions in SY16, 47% fewer had them in SY17.

Interpretation of findings. Given that matched students also had declining GPAs and attendance rates from one year to the next, it seems likely that other factors influenced the changes. One possibility for lower GPAs could be increasing course difficulty over time.

It may be that participation in STEP-UP influenced students whose behavior improved. In light of the fact that some students with no behavior incidents before the internship had them the following year, we have to consider that factors other than the program had an influence on behavior change.

Table 23

Comparison of Intern Non-involvement in the Disciplinary System, 2015 and 2016 Cohorts

		2015 Cohort		2016 Cohort	
		% without SY15	% without SY16	% without SY16	% without SY17
Achieve	Referrals	83	92	90	97
	Removals	99*	96*	97	98
	Suspensions	95	97	87	97
Discover	Referrals	79	83	86	92
	Removals	97*	93*	91	92
	Suspensions	90	90	92*	86*

*Decline rather than an increase pre-to post

Exploratory Study Results Targeting Preliminary Level of Evidence: Employability

Summary of findings. The exploratory impact study sought preliminary evidence about whether interns achieved better employability outcomes pre- to post-program. In 2016, both Achieve and Discover interns improved in job-related skills: knowing what questions to ask in an interview, what questions to expect in an interview, and identifying people to use as professional references.⁶¹ These outcomes were consistent with the results of 2015.

In addition to the skills mentioned above, in 2016, Achieve interns showed positive changes in self-assessments of a number of personal skills⁶². Other than the interview and references skills, Achieve interns did not show change in employment-specific skills pre- to post. In 2016,

⁶¹ After correcting for multiple comparisons, the difference on naming references was not statistically significant from pre to post.

⁶² Staying calm under stress, accepting criticism, looking for additional tasks when work is complete, and breaking problems into small parts to solve them (the last one not statistically significant after correcting for multiple comparisons)

Discover interns showed positive changes in their self-assessments of other employment-specific skills: knowing what clothes to wear to work, oral and written communication in a professional setting, and creating a professional resume⁶³. They did not show positive changes in their self-assessments of personal skills.

Interpretation of findings. It is possible that Discover students, because they most likely had less experience in a work environment prior to their STEP-UP internship, had more to learn about workplace decorum and practices. Achieve interns, older and more experienced, may have been more open to personal growth.

The exploratory analyses examining differences for interns who worked more hours per week or more weeks per year showed no differences in employability outcomes. There were some differences for interns with more than a single year of experience with STEP-UP. Both Achieve and Discover interns had better outcomes about interview skills, and two personal skills and one employment-specific skill. This suggests that having more than one STEP-UP summer internship may improve some employability skills.

Limitations: employability skills. When interpreting outcomes of the employability section of the study, it is important to consider a number of limitations. The instrument used to gather data on interns was revamped for the 2016 cohort. Because of changes to many of the questions and the rating scale, it is difficult to compare many of the outcomes to previous cohorts. The instrument addressed self-ratings by youth, and many of their ratings were generous in the pre-test, making it difficult to have much positive change from pre- to post. We were not able to compare ratings by youth to ratings given by their supervisors to check for alignment. In addition, the kind of personal skills included in the instrument (e.g., problem-solving, accepting criticism) take more time to develop than a single summer's internship. On the employability instrument self-ratings, an increase pre- to post is not necessarily an improvement. If a student came to assess his/her skills more realistically and gave a lower rating, that might be a positive outcome. We cannot be certain from these data what happened to that student. Finally, while most students in the program completed the pre-program survey, a more limited number completed the post-program survey. Results might have differed if we had data from all interns who completed their internship.

⁶³ After correcting for multiple comparisons there was not a statistically significant difference pre to post on resume writing.

Conclusions and Recommendations

This impact study targeted a moderate level of evidence using a quasi-experimental matched-groups design to examine the program’s effect on educational outcomes and post-secondary enrollment. It sought to answer the confirmatory question, “Does the STEP-UP summer jobs program improve school outcomes?” The evaluation for 2016 for all STEP-UP participants (and only for Achieve in 2015) demonstrated moderate evidence of a small positive effect on students’ being on track to graduate in four years. The evaluation did not find moderate evidence of positive program effects on other school outcomes, academic or behavioral, including postsecondary enrollment.

Recommendations

While this report concludes the SIF external evaluation of STEP-UP, there are several areas of research that would be beneficial to AchieveMpls, the City of Minneapolis, and others in the field of youth employment regarding the benefits of internships on youth.

1. Continue to examine longitudinal data to see if there are differences between a comparison group and interns. Because of the length of the grant, this evaluation was not able to access data on any participants who completed post-secondary education and entered the workforce. It is possible that participation in STEP-UP internships will have an impact on these outcomes, but we were not yet able to access data to examine this possibility. Tracking more youth over a longer trajectory and examining variables such as college graduation, type of employment, and wages could demonstrate longer-term impacts of the program.
2. Focus on the use of non-academic outcome measures to measure program impact. STEP-UP did not show many positive effects on short-term school outcomes, which is logical given that the elements of the program (training, internship, career enrichments/specialized training) do not specifically target these outcomes. We know from survey responses that the program is having an effect on interns—expanding their consciousness about what the world of work is like, developing their networks in the professional community, helping them imagine what kind of career they might like and what path they need to take to achieve it, and becoming more comfortable in the workplace.

Developing an instrument to measure these effects and comparing them to peers over time may provide useful information about program effects in the future. We encourage STEP-UP to move in the direction they are considering for assessing employability

outcomes. A retrospective pre-post instrument on which program participants can think about their growth rather than simply rating themselves could be helpful. One way to develop an instrument is to conduct interviews and/or focus groups to help develop pre-post questions. It may also be possible to collaborate with Minneapolis Public Schools on its measures of social and emotional learning instruments. The results could also be compared to supervisor ratings of students.

3. Consider a rigorous exploration of the dynamic between the supervisor and the intern as a contributing factor to internship success. This could draw on and contribute to the extensive research base on coaching/mentoring youth (and connects to other programs run by AchieveMpls). Interviewing both supervisors and interns could identify key factors that influence a productive internship as well as some of the longer-term goals of the program.

Growing out of the implementation and impact studies, there are a number of steps the program could consider for strengthening the work of STEP-UP.

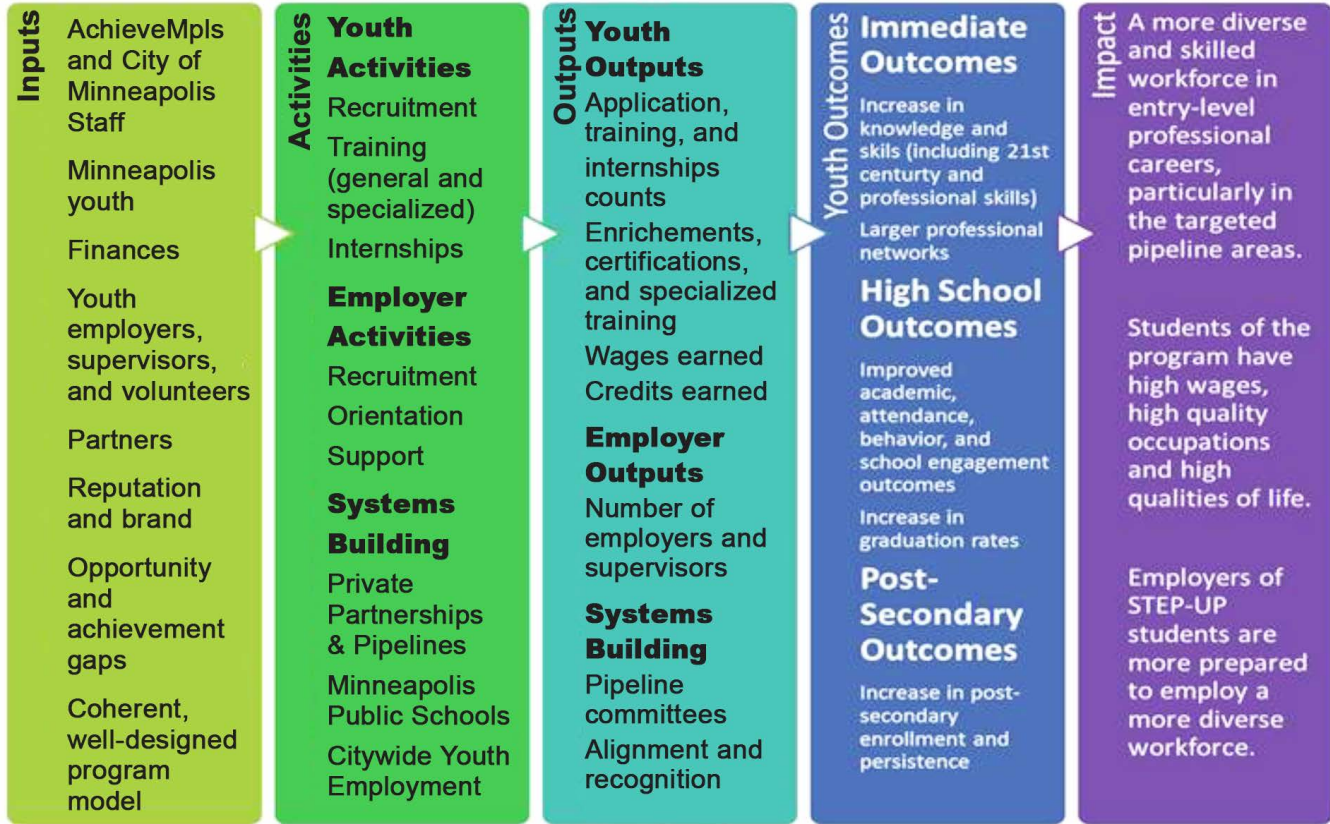
4. As the curriculum for intern training is revamped, align training curriculum for interns more closely with desired employability outcomes. Having seen changes in the students' self-ratings on skills taught specifically in the training (e.g., interviewing skills), the evidence suggests that even over a short period of time it is possible to influence the growth of participants in the program.
5. Better align supervisor orientation and oversight with the desired employability outcomes for interns. Provide increased support to supervisors throughout the internship period that focuses on these outcomes. In the 2016 and 2017 program seasons, STEP-UP staff members took steps to work with the supervisors to encourage their intentional work with interns on employability outcomes. This continues to be an area of potential development for the program, though not a simple one to achieve given the challenges of finding supervisors, constraints on the time supervisors have available for working directly with interns, coaching skills of the supervisors, constraints on STEP-UP staff time, and of course, the complex nature of many of the employability outcomes.
6. Revamp the logic model to eliminate school outcomes that are not impacted by the program and continue to revise it as other outcomes are demonstrated to have positive effects.

References

- Maruyama, VanBoekel and Cobie (2013). “The STEP-UP Summer Jobs Program: Participants and Outcomes [Confidential: For Comment and Discussion].” University of Minnesota.
- Michlin, M. L. & Schultz, A. R. (2016). *Summer Youth Employment Programs Effect Size Review*. Saint Paul, MN: University of Minnesota, College of Education and Human Development, Center for Applied Research and Educational Improvement.
- Shadish, W. R., Cook, T. D. & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. New York: Houghton Mifflin Co.
- Valentine, E.J., Anderson, C., Hossain, F., & Unterman, R. (2017). *An Introduction to the World of Work: A Study of the Implementation and Impacts of New York City’s Summer Youth Employment Program*. Prepared for the U.S. Department of Labor by MDRC. Retrieved from http://www.mdrc.org/sites/default/files/SYEP_Embedded_Full_Report_508_rev2.pdf.

Appendix A

STEP-UP Logic Model



Appendix B: STEP-UP Intern Training Curriculum Topics

	Discover (High School)	Achieve	Advanced
Session 1	<ul style="list-style-type: none"> • Program information • Jobs vs. Careers • Professional Introductions • Attitude & Character 	<ul style="list-style-type: none"> • Program information • Jobs vs. Careers • Networking • Resumes • Attitude & Character • Job preferences 	<ul style="list-style-type: none"> • Program information • Reflection on previous experience • Networking • Resumes • Marketing yourself as a young professional • Cover letters • Job preferences
Session 2	<ul style="list-style-type: none"> • Learning styles • Communication types • Perception vs. Reality • Situational communications • Professionalism 	<ul style="list-style-type: none"> • Communication • Professionalism • Ethics • Praise, criticism & feedback • Interviewing • Dressing for Success 	<ul style="list-style-type: none"> • Interpersonal communications • Professionalism • Praise, criticism, & feedback • MHA • Interviewing • Dressing for success • Starting your job
	Mock Interviews	Mock Interviews	Mock Interviews
Session 3	<ul style="list-style-type: none"> • Praise, criticism & feedback • Building a strong relationship with your supervisor • Decision-making & workplace ethics • Resumes • Interviewing • Dress for Success • Career interest assessment • Job preference for the application 	Intake Interviews	Intake Interviews
Session 4	<ul style="list-style-type: none"> • First day on the job • Required work documents • I-9 proper identification form • Rules for using cell phones at work • Email and phone etiquette 		
	Intake Interviews		

APPENDIX C

Implementation Data: 2017

Program Fidelity: Major components remained the same in 2017 as in 2016.

Training:

During training in 2017, Achieve staff members assisted with particular parts of the curriculum for the first time.

In addition to the training prior to the summer, Discover interns participated in classes during the internship period. In the summers of 2014-16 interns attended classes once a week for eight weeks; this was a vestige in the program from the time when there was not training in the spring for Discover interns. In 2017 weekly classes were replaced with a single professional development day (7 hours). The change was made in response to youth dissatisfaction with the weekly classes. Youth were frustrated by the repetitive content, the weekly time commitment getting to and from the class, as well as the class itself. The day long program afforded participants the opportunity to talk to each other about their jobs and heard about why the program is different for 14-15 years old and how it changes as they turn 16. They also took part in activities based on Holland's code, guiding them into active learning about career pathways.

Supervisor Orientation:

In 2017 STEP-UP Achieve made significant changes and improvements to the Supervisor Orientation, developed and offered a more advanced class to returning supervisors for the first time, and drove participation by communicating to employers that these trainings were mandatory. Three hundred and ninety-five (395) supervisors attended a training this year, about a third more than last, and AchieveMpls received overwhelmingly positive feedback. During the 101 sessions, they stressed to new supervisors the importance of their role, that each one of them could be the person who helps their intern get their footing and start down a rewarding, life-long career pathway. During these classes, they walked through the basic elements of a well-planned internship, including a thorough work plan, the importance of the first week, having a colleague to serve as a mentor in tandem with the supervisor, and providing continuous feedback connected with foundational skills outlined in their handbooks. They also covered cultural competency, implicit biases, Imposter Syndrome, and to not assume that interns know what is expected of them in the workplace.

The 201 Curriculum built on training from last year, introducing more advanced tools for building interns' skills, such as adopting the Stance of Inquiry and giving an overview of more complex topics of cultural competency. The training focused on helping managers appreciate diversity in the workplace through the Intercultural Development Continuum (IDC). Participants learned to recognize where the workplace and individual falls on the IDC and how to create an actionable strategy to achieve an intercultural mindset. They stressed that diversity alone produces nothing; people must cultivate their ability to recognize, adapt to, and promote the unique skills, experiences, and perspectives of their colleagues.

In 2017, STEP-UP partnered with The Brand Lab, Right Track, BrookLynk, and Genesys Works to put on the Supervisor's Toolbox on June 27th, hosted by Ameriprise Financial and sponsored by US Bank and MHA labs, and 54 attended. The session included performances, a panel of alumni, and breakout sessions.

The Achieve supervisor handbook was reworked for 2017.

Internships:

In 2017 the minimum wage for Achieve interns was established at \$.50 above the state minimum.

In 2017 all Discover interns were limited to 20 hours a week – including their one-day PD session (they had to work fewer hours at their worksite that week) – due to the large funding cut from the state Youth at Work competitive grant. This cut did not account for the funding cut, but it helped.

RESEARCH QUESTIONS:

The discussion that follows summarizes the findings according to the research questions upon which the study was based.

4. Has the STEP-UP program implemented all of its major components with fidelity?
 - b. To what extent have the youth output targets been met? (comparison of current year's outputs to current year's targets)

Eligible Applicants: Compared to targets for 2017, the actual number of eligible applications fell short of targets by 573 (4,000 vs. 3,427). The number of applicants in 2017 was just short of the number in 2016 (20 fewer).

Work-Readiness Training Completers: Compared to targets for 2017, the number of students completing work-readiness training fell slightly short of the target (2,250 vs. 2,077). More students completed work-readiness training than in 2016 (2,036).

Internships Completed: In 2017, the number of youth completing internships fell short of the target (1,585 vs. 1,378). More youth completed internships in 2017 than in any of the years included in the SIF grant (2014, 2015, 2016).

Extra Enrichments/Specialized Career Training: For activities of 20 or fewer hours, 656 interns participated in 2017. This exceeded the target of 520 and was more than the number in 2016 (424). For activities longer than 20 hours, 66 interns participated in 2017, fewer than the target of 90 participated and fewer than the number in 2016 (71).

Work-based Learning Credit: Approximately 1,000 credits were earned (still being processed at the time of writing).

Wages: In 2017, STEP-UP interns earned an estimated \$3 million in wages).

Youth output numbers in 2017 were close to the 2016 numbers for training and higher for internships and short specialized training. The shorter career enrichment opportunities and number of available internships exceeded targets; applications, training completers, internship completers, and longer career enrichment numbers in 2017 were short of targets.

i. To what extent have the employer output targets been met?

Number of Available Internships: In 2017, 1,495 internships were available, more than the target (1,440). This was an increase over 2016 (1,389).

Number of Companies: In 2017, 212 companies had STEP-UP interns. This was a small decrease over 2016 (256). There were not targets for the number of companies.

Number of Supervisors: In 2017, 543 supervisors worked with STEP-UP interns, an increase of 30 over 2016. No targets were set for the number of supervisors.

Types of Settings: Achieve interns served in a range of industries as well as non-profit and government settings. While Discover interns worked in the nonprofit sector only,

the types of organizations in which they were placed also varied. This was consistent with previous years.

	2014		2015		2016		2017	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Eligible Applications	3,754	3,678	4,000	3,062	4,000	3,447		3,427
Accepted to program	3,678	3,582	3,800	3,003	3,100	3,447	4,000	3,427
Completed Work-Readiness Training	2,200	2,076	2,125	1,879	2,200	2,036	2,250	2,077
Internships started	1,500	1,425	1,400	1,238	1,420	1,389	1,440	1,495
Completed internships	1,278	1,222	1,300	1,132	1,310	1,272	1,585	1,378
Companies/Organizations participating		268		212		226		212
Supervisors		539		505		513		543
Specialized Training/Career Enrichment Activities (20 hours or fewer)	250	576*	470	491	500	424	520	656
Specialized Training/Career Enrichment Activities (more than 20 hours)			82	124	85	120	90	66

APPENDIX D

Career Enrichment and Specialized Trainings

During the 2016 program cycle, AchieveMpls offered the following events:

Legal Careers Exploration: A field trip sponsored by the Hennepin County Bar Association (HCBA). Students learned about legal careers from a panel of HCBA members, met with Hennepin County Judges William Koch and James Moore, and observed a variety of hearings. (4 hours)

Financial Services Careers: Financial services company volunteers spent a day with STEP-UP Achieve interns to talk about the wide range of careers available in financial services and the underlying skills that are essential to success. The event featured a panel representing distinct areas of financial services, professional development sessions, and a speed career networking exercise with industry representatives. (4.5 hours)

High Tech Innovation Day: Interns explored new technologies (from Google Glass and Google Cardboard, to virtual reality tools, to smart watches and others) and learned about design thinking and the process of iteration. The program was led by volunteers from CoCo, a co-working space and innovation hub, and local tech businesses. (8 hours)

Pre-Employment Training for Healthcare (PETH): This training was designed to help youth understand the range of health careers available and the underlying skills essential to success. Interns learned about customer service in healthcare, terminology, confidentiality, HIPAA, and living the organization's mission. Volunteers representing nine different industries hosted (8 hours) panels to introduce interns to different career paths and education requirements.

Excel Training Program: Excel is an essential skill for the workplace but generally not taught in the Minneapolis schools. The purpose of the training series was to fill that gap, allowing interns to develop Excel skills for use in their internships and beyond. Over the course of the summer, participating interns completed a series of online training modules at different levels to enhance their skill development. Interns who were already adept with Excel could prepare for the official certification exam. (Units 1-6 is under 20 hours of training; Level 1 (Units 1-7), Level 2 (Units 7-13, and Level 3 (Units 13-17) are all over 20 hours of training)

Summer Legal Institute (SLI): This intensive 5-day law immersion program took place in June at the University of Minnesota Law School. Interns visited federal courts and law firms, met with judges and practitioners, engaged in mock trials and oral argument competitions, participated in

professional skills and financial literacy workshops and learned about a wide variety of legal careers and required education. SLI was led by Just the Beginning, an organization based in Chicago that develops these camps across the nation. (40 hours)

Outdoor Careers Academy: In partnership with Wilderness Inquiry⁶⁴, interns in the program learned about “leave no trace” principles, first aid/CPR, workforce options, and earning an Outdoor Leadership credential. (24 hours)

IT Training Credential: This new training and certification program introduced students to Scratch (multi-media) programming, Linux, Python, computer security, and careers and education in IT. Consisting of ten 45-minute modules (each including lecture and hands-on activity) based on Advance IT Minnesota’s IT Exploration Curriculum, it was led by an IT instructor from Minneapolis Community and Technical College (MCTC). (21hours)

Scrubs Camp: This week-long camp in July gave interns the chance to participate in hands-on healthcare activities and to learn about health-related careers while experiencing life on the Augsburg College campus. (40 hours)

Camp Explore: This is a week-long residential camp offering high school students hands-on, engaging activities to help them explore many different STEM careers in key sectors.

Financial Education Day: Run by US Bank, this day is an opportunity for interns to learn about their personal finances.

Golden Gopher Day: This program is a day at the University of MN where interns learn more about the college experience, connections between degrees and careers, and how to prepare for post-secondary education.

For Discover interns, the following programs were offered in 2016:

Silicon North Stars: A partnership with the **Silicon North Stars** program made it possible for eight 14-year old interns to travel to Silicon Valley for a week-long technology camp. The trip included meeting with internet and technology leaders from top companies, startups, and venture capital funds. The camp concluded with a design thinking challenge and demo day project in which the students competed in teams to create and pitch their own startup ideas to a crowd of tech professionals. Quarterly these youth, plus the youth from past years get together on a

⁶⁴ Wilderness Inquiry is a non-profit organization that conducts outdoor adventure experiences and travel with the purpose of inspiring personal growth, enhanced awareness of the environment and community integration

Saturdays to tour tech companies in the Twin Cities and continue to receive mentoring throughout high school.

Camp Sunrise: A partnership with YouthCARE/Camp Sunrise offered STEP-UP Discover interns the chance to spend a week at a rustic camp. Many interns have never had a camping experience. This experience offered them an opportunity to participate in all the usual camp activities and introduced them to outdoor career opportunities. In addition, interns developed leadership skills and completed work projects to support the camp. Forty-one (41) interns spent a week at Camp Sunrise in the summer of 2016.

APPENDIX E

Survey Questions Used to Assess Program Implementation

OUTPUTS		
Program component	Data source	Survey questions (where relevant)
Training	STEP-UP database	
Pipelines/Career Enrichment Activities	STEP-UP database	
Internships: Interns	STEP-UP database; baseline survey; end- of-summer intern survey	<p>End-of-summer intern survey (Achieve):</p> <p>Salary: What was your hourly wage? Minimum Wage (\$9.00, \$9.50 after August 1st) \$9.51--\$9.74 per hour \$9.75--\$9.99 per hour \$10.00--\$10.24 per hour \$10.25--\$10.49 per hour \$10.50--\$10.74 per hour \$10.75--\$10.99 per hour \$11.00--\$11.49 per hour \$11.50--\$11.99 per hour \$12.00--\$12.49 per hour \$12.50--\$12.99 \$13.00 or more per hour</p> <p>Weeks worked: The "official" dates for STEP-UP internships for this summer were June 20--August 19th, or 9 weeks. Some organizations needed interns for different dates. How many weeks did you work in your job? 4 weeks 5 weeks 6 weeks 7 weeks 8 weeks 9 weeks 10 weeks More than 10 weeks</p> <p>Hours worked per week On average, how many hours a week did you work at your job this summer? Less than 10 hours a week Between 10-15 hours a week Between 16-25 hours a week Between 26-34 hours a week Between 35-40 hours a week More than 40 hours a week</p>

		Baseline survey: Previously held job I have had a paid job before. Y/N
Internships: Supervisors	STEP-UP database	
Internships: Placements	STEP-UP database	

FIDELITY OF IMPLEMENTATION		
Program component	Data source	Survey questions (where relevant)
Training	Staff interviews; program website; program documents	
Pipelines/Career Enrichment	Staff interviews; program website; program documents	
Internships	Staff interviews; program website; program documents	

PROGRAM DOSAGE		
Program component	Data source	Survey questions (where relevant)
Training	Program documents	
Internship	Program documents	
Pipelines/Career Enrichment	Program documents	

PROGRAM EXPOSURE/SATISFACTION/QUALITY		
Program component	Data source	Survey questions (where relevant)
Training	Post-training survey; end-of-summer intern survey	Post-training survey: SD/D/A/SA My trainer was knowledgeable about the topics covered during training. My trainer taught the lessons in a way that was clear. My trainer taught the lessons in a way that was engaging. After today's training, I am ready for a job.
Training	End-of-summer intern survey	End-of-summer intern survey:

		<p>To what extent do you agree with each of the following statements about your experience in STEP-UP? SD/D/A/SA</p> <p>The training sessions prepared me for my summer job. I used the skills I learned at training in my job.</p>
Internships: Time worked	End-of-summer intern survey (Achieve); STEP-UP database (Discover)	<p>End-of-summer intern survey:</p> <p>Weeks worked: The "official" dates for STEP-UP internships for this summer were June 20--August 19th, or 9 weeks. Some organizations needed interns for different dates. How many weeks did you work in your job? 4 weeks 5 weeks 6 weeks 7 weeks 8 weeks 9 weeks 10 weeks More than 10 weeks</p> <p>Hours worked per week On average, how many hours a week did you work at your job this summer? Less than 10 hours a week Between 10-15 hours a week Between 16-25 hours a week Between 26-34 hours a week Between 35-40 hours a week More than 40 hours a week</p>
Internships: Activities	End-of-summer intern survey; End-of-summer supervisor survey; program documents	<p>End-of-summer intern survey:</p> <p>How often, if at all, did these things happen at your internship? Never/Once/A few times over the summer/Once a week/A few times a week/Every day</p> <p>Someone on the staff talked to me about my future plans. My supervisor met with me to track my work progress. My supervisor gave me feedback about my performance. My supervisor used the MHA Labs 12 Hirability skills when talking about my performance. I had a chance to learn more about a career in the field (examples: job shadow, informational interview). Someone reflected with me on my accomplishments and what I learned. I participated in specialized training (such as Excel, Outlook, or database)</p>

		<p>How well does each of the following statements describe your internship experience? 1 (not at all) 2 3 4 5 6 (Completely)</p> <p>Someone gave me clear directions on how to complete tasks. Someone helped me understand what the company/organization does. Someone explained expectations and policies (such as cell phone use and appropriate dress). My supervisor provided me with a written work plan with clear goals. My supervisor gave me input on setting my internship goals. My supervisor gave me choices about the projects I would work on. The tasks I had were challenging. I had a mixture of short-term and longer-term projects over the summer. I got to learn skills I needed to do my job.</p> <p>End-of-summer supervisor survey</p> <p>How often, if at all, did these things happen at your workplace over the summer Never/Once/A few times over the summer/Once a week/A few times a week/Every day</p> <p>My intern had a chance to learn more about a career in the field (examples: job shadow, informational interview).</p> <p>How well does each of the following statements describe the internship experience at your site? 1 (not at all) 2 3 4 5 6 (Completely)</p> <p>My intern(s) had a mixture of short-term and longer-term projects over the summer. My intern(s) had opportunities to learn job-related skills. My intern(s) had a structured work plan with measurable goals. My intern(s) tasks were appropriately challenging.</p>
<p>Internships: Supervisory Time</p>	<p>End-of-summer supervisor survey</p>	<p>End-of-summer supervisor survey</p> <p>How often, if at all, did these things happen at your workplace over the summer Never/Once/A few times over the summer/Once a week/A few times a week/Every day</p> <p>I met with my intern(s) to give feedback. I used the MHA Labs 12 hirability skills to give feedback to my intern(s). In a <i>typical week</i>, how much time did you spend on each of these activities? Not at all/15 minutes/30 minutes/45 minutes/An hour/90</p>

		<p>minutes/2 hours/More than 2 hours</p> <p>a) Teaching my intern job related skills b) Giving feedback to my intern c) Doing check-ins d) Talking about the career field e) Developing/reviewing the work plan with my intern</p>
Internships	End-of-summer intern survey; end-of-summer supervisor survey	<p>End-of-summer intern survey:</p> <p>To what extent do you agree with each of the following statements about your experience in STEP-UP? SD/D/A/SA My summer job was related to my interests. My summer job was a valuable learning experience. I felt I made a valuable contribution to my workplace. My job helped me decide what career to pursue in the future.</p> <p>How likely is it that you will stay in touch with your supervisor and/or mentor? Very likely, we have already made plans to do so/Likely, we talked about it/I'm not sure/Not likely/I am not interested in keeping in touch with my supervisor/mentor</p> <p>STEP-UP has prepared me to become a valuable part of the future workforce of Minneapolis. SD/D/A/SA</p> <p>How have you benefited from participating in the STEP-UP Summer Jobs Program? (open-ended)</p> <p>How would you suggest improving the program for next year?</p> <p>End-of-summer supervisor survey:</p> <p>How well does each of the following statements describe the internship experience at your site?</p> <p>1 (not at all) 2 3 4 5 6 (Completely) The tasks the intern(s) did had a positive impact on our workplace. My STEP-UP experience helped me feel more culturally competent. My STEP-UP experience helped me feel better prepared to work with the future work force.</p> <p>Think about the amount of time you spent weekly</p>

	<p>working with your intern and engaging in activities related to the internship. How did this compare with the amount of time you expected to spend on STEPUP? Less time than I expected About what I expected More time than I expected</p> <p>Was the student matched to your company/organization a good fit for the job? No/Yes</p> <p>Overall, did your intern(s) make a valuable contribution to your organization this summer? No/Yes</p> <p>To what extent do you feel that STEP-UP Program was a success at your organization? Not at all successful/Minimally successful/Moderately successful/Very successful</p> <p>Please answer these questions about the supervisor orientation. 1 (not at all) 2 3 4 5 6 (A lot)</p> <p>To what extent did the Orientation help you prepare for the internship experience? b) To what extent did the Orientation help you supervise your intern during the summer?</p> <p>What was most helpful about the handbook? (open-ended) What could we add to the handbook that would make it more helpful? (open-ended)</p> <p>How helpful did you find each of the following parts of the weekly emails from STEP-UP? 1 (not at all) 2 3 4 5 6 (Completely)</p> <p>a) Intern/Supervisor Connection b) Information about Professional Development Events c) Requests and reminders d) Job Coach Corner on Hirability Skills</p> <p>Please answer these questions about the responses you got from STEP-UP Achieve/Discover during the summer. N/Y</p> <p>a) Did you receive timely responses when you had a question/concern? b) Did you receive helpful responses when you had a question/concern?</p> <p>1 (not at all) 2 3 4 5 6 (Completely) To what extent did you get the support you needed from STEP-UP Achieve/Discover?</p> <p>Please give us your feedback on the <i>MHA Labs</i></p>
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		<p><i>Hirability Skills Framework</i> and <i>weekly check-in template</i>.</p> <p>1 (not at all) 2 3 4 5 6 (Completely)</p> <p>How helpful was the MHA Labs 12 Hirability Skills Framework to you as a supervisor?</p> <p>How helpful was the weekly check-in template for supporting your intern(s)?</p> <p>Please provide feedback on the <i>work plan and evaluation template</i>.</p> <p>How helpful was the work plan section of the template? How helpful was the intern evaluation section of the template?</p> <p>What did you enjoy most about being a STEP-UP supervisor this summer? (open-ended)</p> <p>What suggestions do you have for how the program could be improved in the future?</p>
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PERCEPTIONS OF THE PROGRAM		
Program component	Data source	Survey questions (where relevant)
Training	Group interviews conducted by AchieveMpls staff	
Internships	Group interviews conducted by AchieveMpls staff	

APPENDIX F

Perceptions Study

Group Interview Protocol Spring Interviews:

Never Participated in STEP-UP

Thanks for coming today. We represent the STEP-UP program and we're trying to learn what young people think about STEP-UP and how we can improve it.

1. Please tell us your name and what you did last summer.
2. When you hear the name STEP-UP, what are words that come to your mind?
3. What have you heard other students in your school say about STEP-UP?
4. What have you heard adults in your school say about STEP-UP?
5. Did you ever consider applying to STEP-UP?
 - a. If you did apply, what appealed to you about the program?
 - b. If you did not apply, what bothered you about the program?
6. Please complete this sentence in writing and then we'll share answers: STEP-UP is a program that is best for . . . (probe responses)
7. What would make you want to do STEP-UP?
8. We'd like your advice. Please complete this sentence: STEP-UP, you'd be smart if you . . .
9. Is there anything I missed today? Is there anything you'd like to say that you didn't get a chance to say?

Previously participated in Discover but didn't reapply

1. Please tell us your name and what STEP-UP internship you had.
2. When you hear the name STEP-UP, what are words that come to your mind?
3. Think back to your internship with STEP-UP. What did you like most about STEP-UP?
(Possibility: sticky notes)
4. What did you not like about STEP-UP? (Possibility: sticky notes)
5. What patterns do we see in the sticky notes? (if that activity is used)
6. What kept you from applying again?
7. What will you do this summer instead of STEP-UP?
8. We'd like your advice. Please complete this sentence: STEP-UP, you'd be smart if you . . .
9. Is there anything I missed today? Is there anything you'd like to say that you didn't get a chance to say?

Previously participated in Achieve but didn't reapply

1. Please tell us your name and what STEP-UP internship you had.
2. When you hear the name STEP-UP, what are words that come to your mind?
3. Think back to your internship with STEP-UP. What did you like most about STEP-UP?
(Possibility: sticky notes)
4. What did you not like about STEP-UP? (Possibility: sticky notes)

5. What patterns do we see in the sticky notes? (if that activity is used)
6. What kept you from applying again?
7. What will you do instead of STEP-UP?
8. We'd like your advice. Please complete this sentence: STEP-UP, you'd be smart if you . . .
9. Is there anything I missed today? Is there anything you'd like to say that you didn't get a chance to say?

Applied and didn't go to training

1. Please tell us your name and what you did last summer.
2. When you hear the name STEP-UP, what are words that come to your mind?
3. You applied to STEP-UP. What made you decide to apply?
4. You were accepted to the program but didn't go to training. What stopped you?
5. Please filling in the blanks in this sentence in writing and then we'll talk about what you wrote: I'd want to go to STEP-UP training if . . . and . . .
6. We'd like your advice. Please complete this sentence: STEP-UP, you'd be smart if you . . .
7. Is there anything I missed today? Is there anything you'd like to say that you didn't get a chance to say?

Adult Staff

1. Please introduce yourself and tell me your role in the school.
2. When you think about STEP-UP, what is the first thing that comes to mind?
3. What have you heard other adults in your building say about STEP-UP?
4. Please complete this sentence in writing and then we'll share answers: STEP-UP is a program that's best for . . . (probe responses)
5. To whom, if anyone, would you/do you recommend STEP-UP? What would be your reasons for recommending it?
6. This is a scale about being an advocate for STEP-UP. Where would you put yourself on the scale?

1	2	3	4	5	6	7
Not at All						Very Strong

What made you put yourself at that place on the scale?

7. We'd like your advice. Please complete this sentence: STEP-UP, you'd be smart if you . . .
8. Is there anything I missed today? Is there anything you'd like to say that you didn't get a chance to say?

Summer Interviews:

SUA Summer Group Interviews: Questions

- Please briefly tell us your name, where you're working this summer.
- What has been a highlight of your internship this summer?
- Think about you current internship. What do you like best about it?
- What past experiences have you had with STEP UP?

- What were some of the benefits you got from previous experiences in STEP-UP?
- Why did you decide to apply to STEP-UP again this year?
- Why did you decide to apply to STEP UP the first time?
- What did you hope to get out of the program?
 - *Have your hopes come true? Or what have you gotten out of the program?*
- What challenges have you had in STEP-UP? This year or previously?
- How was the training helpful to you once you got to your internship?
- If you did Discover, how would you describe the differences between Achieve and Discover?
 - *Where or how did you learn about the differences?*
- Imagine you are trying to get a friend to apply to STEP UP next summer. What would you say to them to encourage them?
- Anything else we should know about your experience with STEP-UP?

Interview Groups

Group	Number of Participants
Roosevelt HS, Never Participated	8
Roosevelt HS, Applied but did not train	8
Roosevelt HS, Did Discover, did not reapply	6
Southwest HS, Applied but did not train	8
Southwest HS, Did Discover but did not reapply	6
Southwest HS, Did Achieve but did not reapply	2
MPS Achieve interns	9
Excel Achieve interns	4

Appendix G

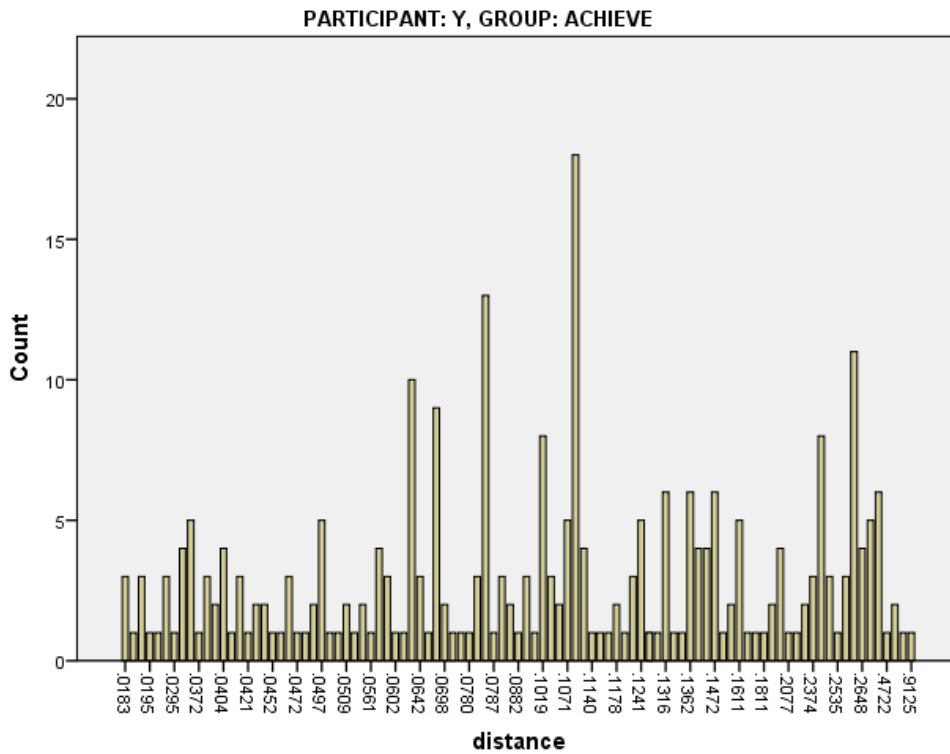
Propensity Score Match

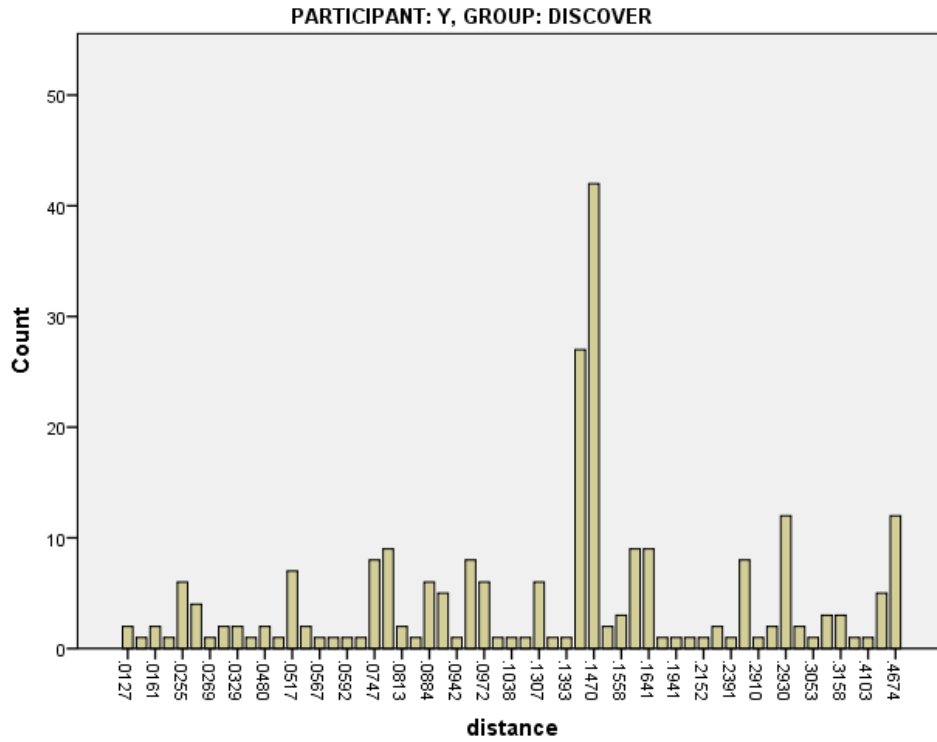
Proportion of Cases Matched

	Students included in model	Proportion of Cases Matched: Comparison	Proportion of Cases Matched: Treatment
Model 1	Grade 10 Discover	8% (196/2,374)	100% (209/209)
Model 2	Grade 11 Discover	6% (33/539)	100% (36/36)
Model 3	Grade 10 Achieve	3% (7/269)	100% (10/10)
Model 4	Grade 11 Achieve	6% (118/2,059)	100% (125/125)
Model 5	Grade 12 Achieve	4% (138/3,142)	100% (147/147)

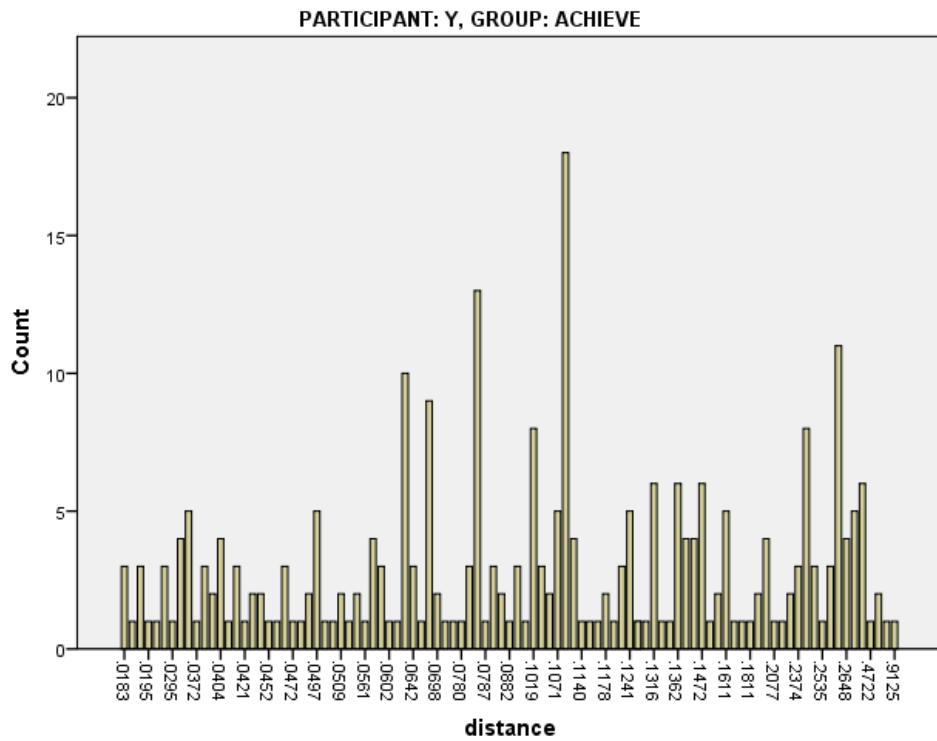
Distribution of the Propensity Scores in the Treatment and Comparison Groups

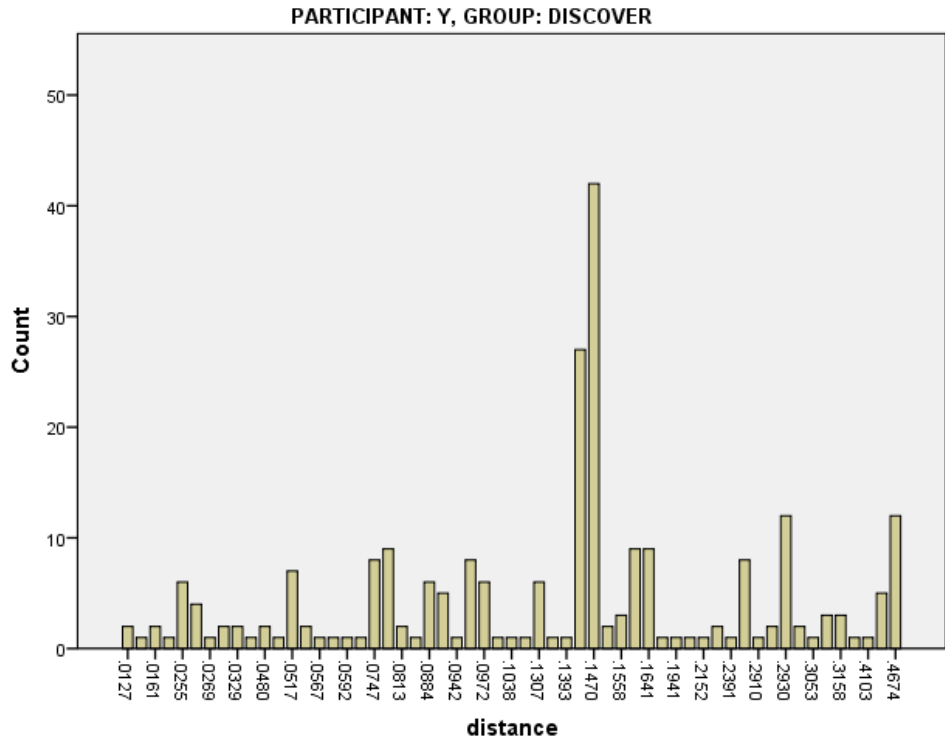
Treatment Groups





Comparison Groups





Standardized Mean Differences in Baseline Characteristics Between Treatment and Comparison Groups

Model 1: Grade 10 Discover

Co-variate	Before Match	After Match
Distance	0.981747	0
Race 1	-0.48597	0
Race 2	0.485968	0
Gender	-0.0928	0.009608
ELL	-0.18661	0
Special Ed	-0.13474	0
Free/Reduced Lunch	0.467407	-0.01206
Homeless/Highly Mobile	-0.07702	0
Home Language 1	0.516378	0.015926
Home Language 2	0.261268	-0.01282
Home Language 3	-0.10697	0
Home Language 4	0.086351	0

Model 2: Grade 11 Discover

Co-variate	Before Match	After Match
Distance	0.916262	0.004624
Race 1	-0.54051	0
Race 2	0.540506	0
Gender	0.013018	-0.05475
ELL	0.134715	0
Special Ed	-0.0156	-0.06917
Free/Reduced Lunch	0.444828	-0.15831
Homeless/Highly Mobile	-0.04408	0
Home Language 1	0.561213	0
Home Language 2	0.218605	0.099038
Home Language 3	-0.25706	0
Home Language 4	0.152443	0.166567
School 1	-0.31956	0
School 2	-0.172	0

Model 3: Grade 10 Achieve

Co-variate	Before Match	After Match
Distance	4.233933	0.144917
Race 1	-0.25923	0
Race 2	0.25923	0
Gender	-0.57421	-0.3703
ELL	-0.36787	0
Special Ed	-0.13661	.1/0
Free/Reduced Lunch	0.435458	0
Homeless/Highly Mobile	-0.08595	0
Home Language 1	2.236934	.2/0
Home Language 2	0.462791	0
Home Language 3	-0.5976	0
Home Language 4	0.531762	-0.37793
School 1	-0.30577	0
School 2	-0.21567	0

Model 4: Grade 11 Achieve

Co-variate	Before Match	After Match
Distance	1.086154	0
Race 1	-0.46226	0
Race 2	0.462264	0
Gender	-0.10744	0
ELL	-0.01881	0.020921
Special Ed	0.016213	0.020921
Free/Reduced Lunch	0.521431	-0.02173
Homeless/Highly Mobile	0.079038	0
Home Language 1	0.536921	0.026093
Home Language 2	0.37806	-0.01845
Home Language 3	-0.13624	0
Home Language 4	0.246421	0
School 1	-0.3633	-0.05205
School 2	-0.08752	0

Model 5: Grade 12 Achieve

Co-variate	Before Match	After Match
Distance	1	0
Race 1	-0.35059	-0.02238
Race 2	0.35059	0.02238
Gender	-0.09455	0
ELL	0.184204	0
Special Ed	-0.08753	0
Free/Reduced Lunch	0.305687	0
Homeless/Highly Mobile	-0.05922	0
Home Language 1	0.677619	0
Home Language 2	0.402678	0
Home Language 3	-0.11667	0
Home Language 4	0.239617	0
School 1	-0.33426	-0.04237
School 2	-0.27779	0.026909

Appendix H

Employability Outcomes Survey Instrument

2. To what extent do you agree with the following statements?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
2) I bring energy and enthusiasm to the tasks that I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3) I take responsibility for my actions instead of blaming others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4) I stay calm under stress.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5) I accept criticism openly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
6) I actively look for additional tasks to do when my own work is done.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7) I actively look for ways to help other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8) I break problems into smaller parts in order to solve them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9) I think of several possible solutions to a problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10) I identify better ways to solve problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11) I manage my time well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12) I get my work done on time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13) I arrive on time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14) I know what clothes to wear for work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15) When speaking, I can communicate in a professional way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17) When writing, I can communicate in a professional way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18) I can describe my skills and strengths on a professional resume.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19) I know what questions to expect in a job interview.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20) I know what questions are appropriate for me to ask during a job interview.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21) I can name two or more people I can ask for a professional reference.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22) I do not give up on tasks, even when I have trouble with them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
23) I can make a valuable contribution to a workplace.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24) I intend to continue my education following high school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25) I know the education required for the work I am interested in doing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26) I am hopeful about my future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix I

Demographic Data on Completing Interns

Gender

	%	<i>N</i>
Male	43	552
Female	57	720

Race/Ethnicity

	%	<i>N</i>
African American	33	424
American Indian	6	73
Asian	11	145
Hispanic	9	110
White	6	78
Ethnic African	29	371
Other/Did Not Indicate	6	71

Training Level

	%	<i>N</i>
Achieve	34	435
Advanced	14	182
HS Discover	30	383
MS Discover	21	272

Eligible for Free/Reduced Lunch

	%	<i>N</i>
No	10	126
Yes	90	1145

Average Hours Worked per Week: Achieve (n = 437)

	%	<i>n</i>
Less than 10 hours	4	17
10-15 hours	18	79
16-25 hours	28	123
26-34 hours	20	86
35-40 hours	27	119
More than 40 hours	3	13

Average Number of Weeks Worked: Achieve (n = 437)

	%	<i>n</i>
4 weeks	5	22
5 weeks	5	21
6 weeks	11	48
7 weeks	8	37
8 weeks	18	80
9 weeks	38	168
10 weeks	8	34
More than 10 weeks	6	27

Previous Paid Job: Achieve (n = 437)

	%	<i>n</i>
No	32	140
Yes	68	296

Previous Paid Job: Discover (n = 479)

	%	<i>n</i>
No	63	362
Yes	37	217

Earnings

Discover	\$944,886
Achieve	\$1,346,340
Total	\$2,291,226

Appendix J

Industries: Intern Placement

Achieve

	Number	Percentage of Total
Architecture & Construction	3	<1
Arts, A/V Technology & Communication	56	9
Business Management & Administration	7	1
Construction	9	1
Education & Training	95	15
Finance	75	12
Government & Public Administration	105	17
Health Science	78	13
Human Services	38	6
Information Technology	2	<1
Law, Public Safety & Security	12	2
Marketing, Sales & Services	26	4
Outdoor and Natural Resources	30	5
Science, Technology, Engineering & Mathematics	59	10
Tourism Services	17	3
Transportation, Distribution & Logistics	4	1
TOTAL	617	100

Discover

While Discover interns worked in the nonprofit sector only, the types of organizations in which they were placed also varied.

	Number	Percentage of Total
Architecture & Construction	16	2
Arts, A/V Technology & Communication	51	8
Business Management & Administration	1	<1
Education & Training	101	23
Government & Public Administration	17	3
Health Science	19	3
Human Services	223	34
Law, Public Safety & Security	6	1
Marketing, Sales & Services	2	<1
Outdoor and Natural Resources	216	33
Misc.	14	2
TOTAL	657	100

Appendix K

Program Exposure

ACTIVITIES

Structure/Orientation. One set of questions asked about the extent (Not at all [1] to Completely [6]) internships were structured and that the interns were oriented to the work they would be doing. As indicated in Figure K1, for 4/5 of Achieve there was strong agreement that *someone explained the work of their organization and explained its policies and procedures*. Three quarters of the interns *got clear directions on completing tasks*. About 3/5 gave a strong rating to the *use of a structured work plan with measurable goals*. For the Discover interns, as can be seen in Figure K2 above, there was strong agreement among 4/5 of interns that *someone explained the work of their organization and explained its policies and procedures*. Three quarters of the interns *got clear directions on completing tasks*. About 3/5 gave a strong rating to the *use of a structured work plan with measurable goals*. Discover and Achieve interns responded in similar ways to these questions.

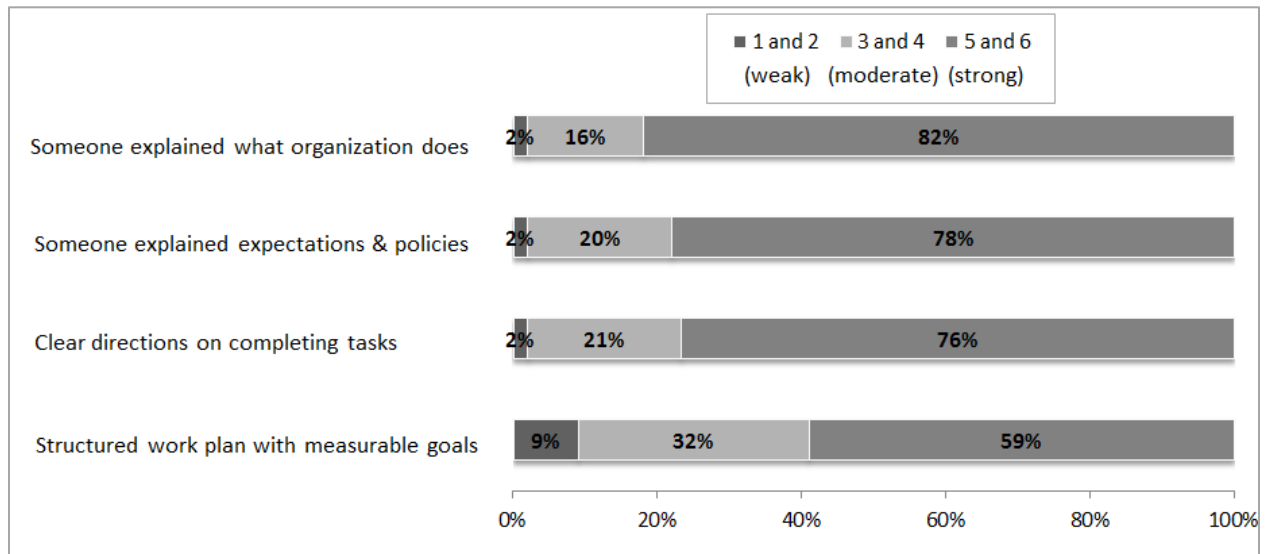


Figure K1. Achieve interns' responses on a scale of 1-6 on questions about orientation and structure at their internships.

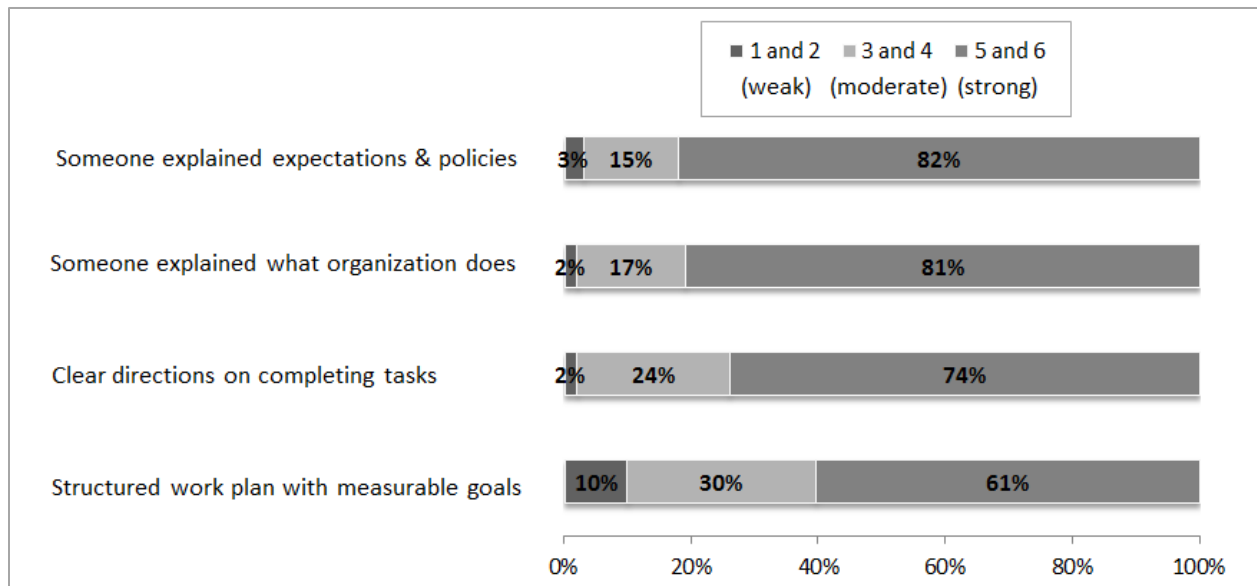


Figure K2. Discover interns' responses on a scale of 1-6 on questions about orientation and structure at their internships.

Interpersonal experiences. Another set of questions asked about the extent (Not at all [1] to Completely [6]) to the kind of interpersonal experiences they had as interns. As seen in Figure K3 above, Achieve interns had strong responses to *being made to feel comfortable* (86%), having a *supervisor who talked to them respectfully* (90%), and having a *supportive supervisor* (85%). As seen in Figure K4 above, Discover interns' responses were similar, with a slightly lower proportion of strong responses. Four-fifths of Discover interns had strong responses to being *made to feel comfortable*, having a *supervisor who talked to them respectfully*, and having a *supportive supervisor*. When asked about the sensitivity to cultural differences of their supervisors, 2/3 of Discover and just over 2/3 of Achieve interns responded with the strongest responses.

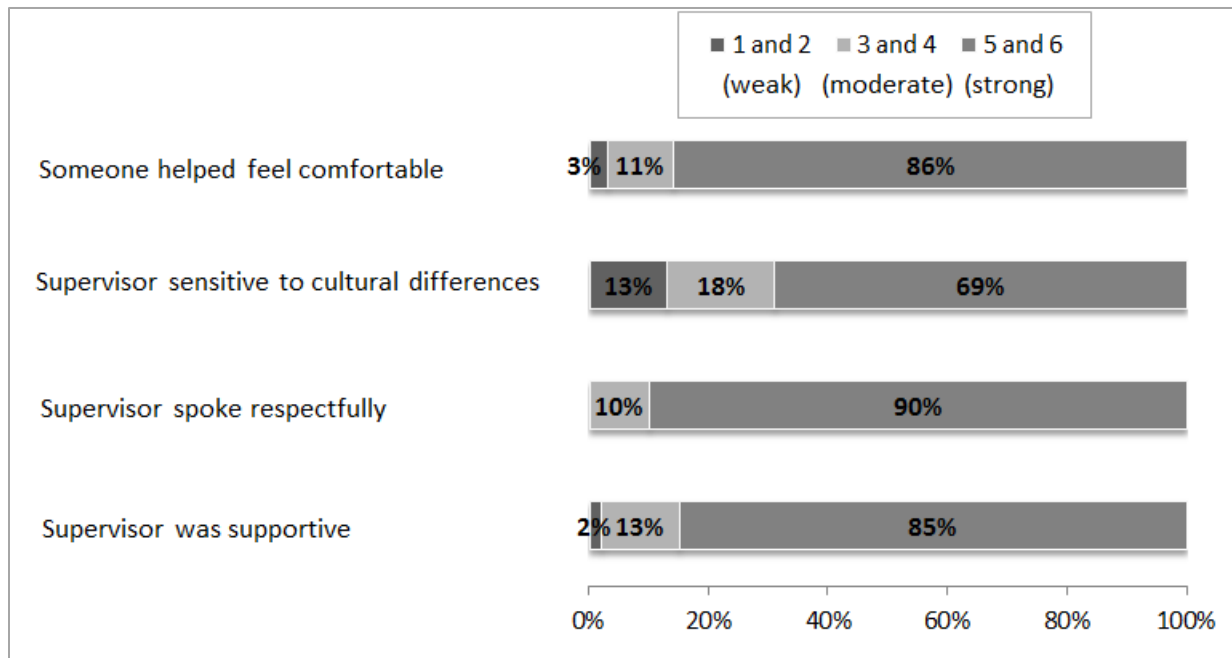


Figure K3. Achieve interns' responses on a scale of 1-6 on questions about interpersonal experiences at their internships.

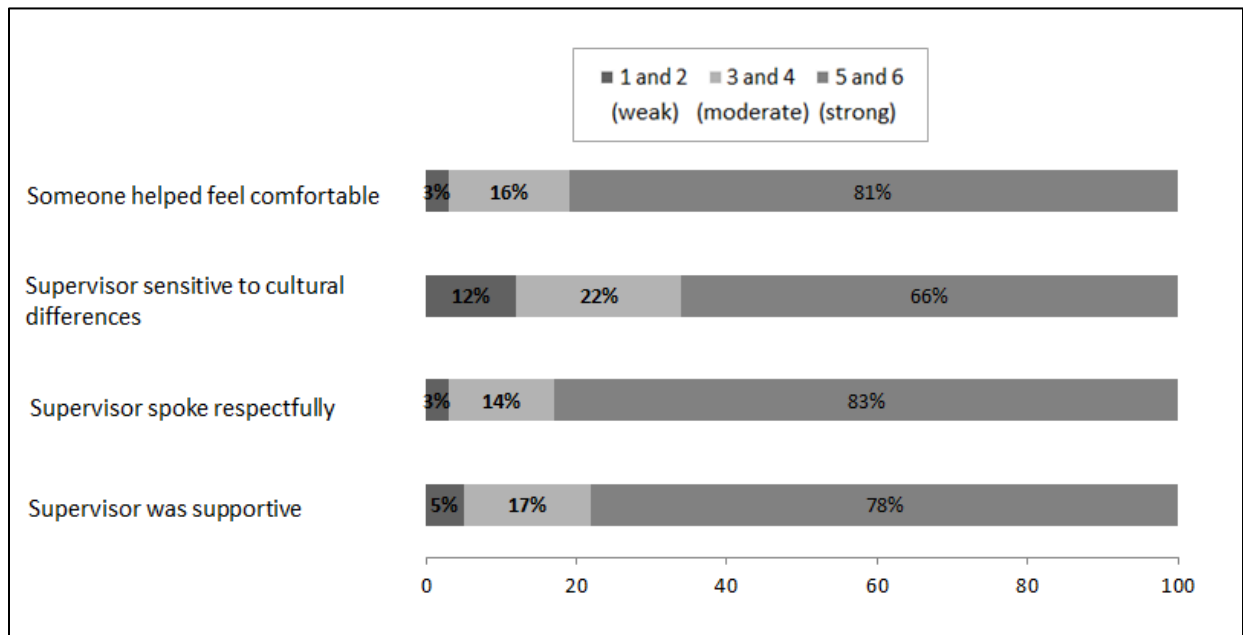


Figure K4. Discover interns' responses on a scale of 1-6 on questions about interpersonal experiences at their internships.

Opportunities for learning. A number of questions asked interns about chances they had during the internship for learning and growth. As shown in Figures K5 and K6, more than half Achieve

(57%) and Discover (51%) chose strong responses about having a *mix of short and long-term projects*. More than three-quarters of Achieve (79%) and Discover (77%) interns chose strong responses about *learning job-related skills* in their internships. Responses were less strong to the question about *how challenging their tasks were*. Among Achieve interns 43% gave strong responses and 39% gave moderate ones. Among Discover interns 37% gave strong responses and 42% gave moderate ones.

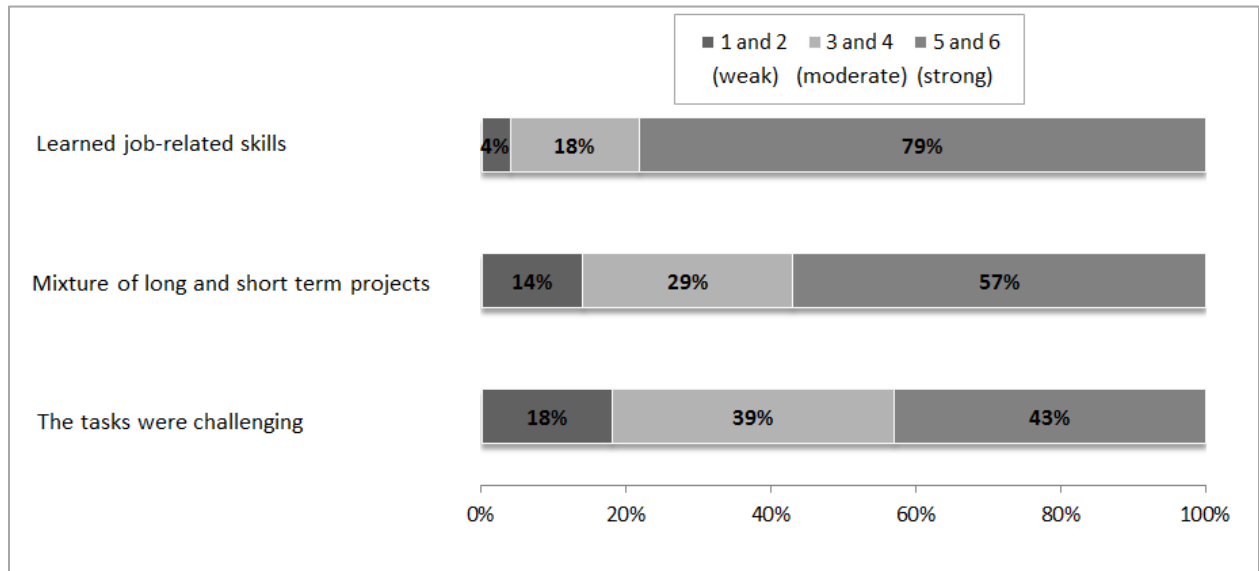


Figure K5. Achieve interns' responses on a scale of 1-6 on questions about opportunities for learning at their internships.

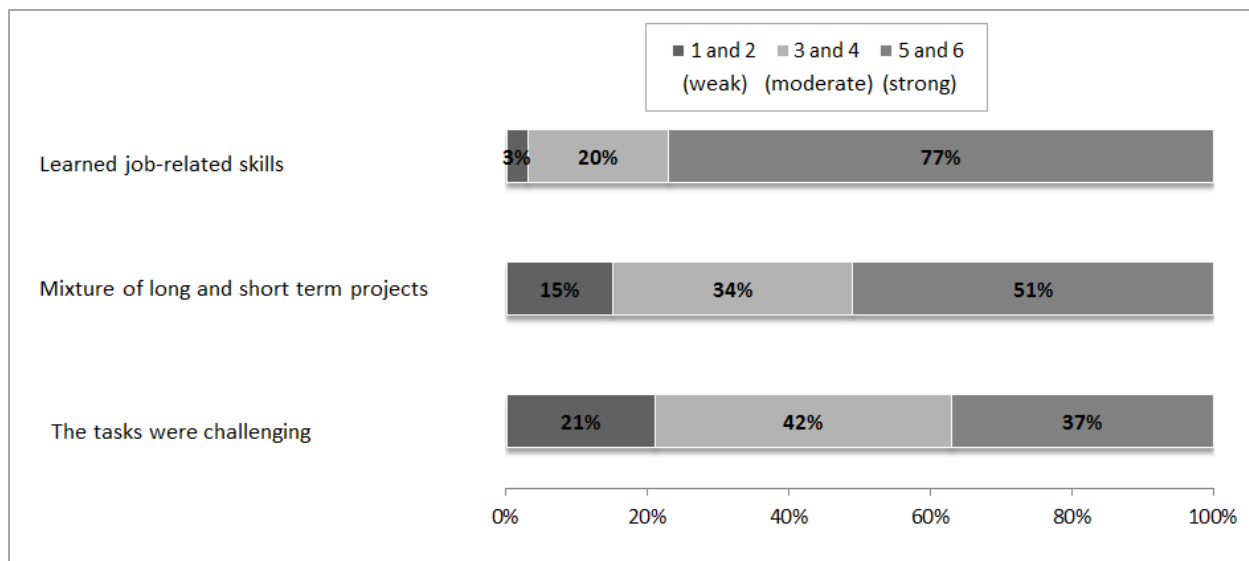


Figure K6. Discover interns' responses on a scale of 1-6 on questions about opportunities for learning at their internships.

Some of the questions about opportunities for learning asked interns how frequently, if at all, they had particular experiences. Given the nature of these experiences, one would expect them to happen at varying rates. For some of the experiences, more does not necessarily mean better.⁶⁵ It is important for program staff to take note of the proportion of interns who indicated they never had particular experiences. Figures K7 and K8 show that four-fifths of Achieve and Discover interns reported that *someone talked to them about future plans* at least a few times over the summer. Four-fifths of Achieve interns reported *learning about a career in the field* at least a few times over the summer; under 3/4 of Discover interns reported that experience. Regarding *specialized training* (e.g., Excel) 1/4 of Achieve interns did not have any and another 1/4 had such training every day. Among Discover interns, fewer participated in *specialized training*; 42% had none.

⁶⁵ Imagine, for example, if a supervisor talked to an intern every day about the intern's plans for the future. That would likely have been considered annoying and inappropriate to the intern rather than helpful.

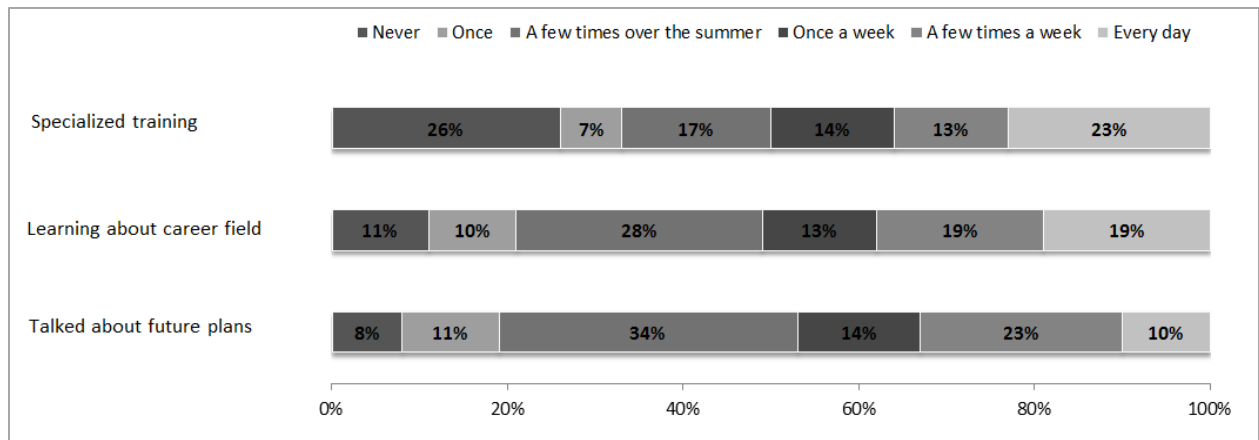


Figure K7. Frequency of learning experiences reported by Achieve interns.

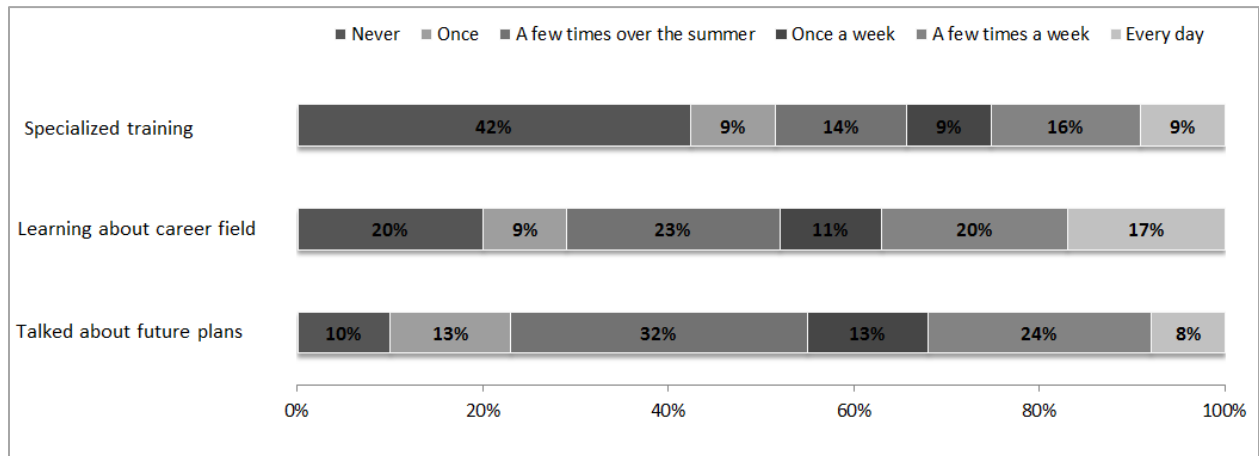


Figure K8. Frequency of learning experiences reported by Discover interns.

Voice and choice. In responses to questions about having *choices about projects* to work on and *input on setting goals*, 2/3 of Discover and Achieve interns gave strong responses. About 1/4 of each group gave moderate responses to those questions. Figures K9 and K10 show the distribution of interns' responses to questions about the amount of choice they had.

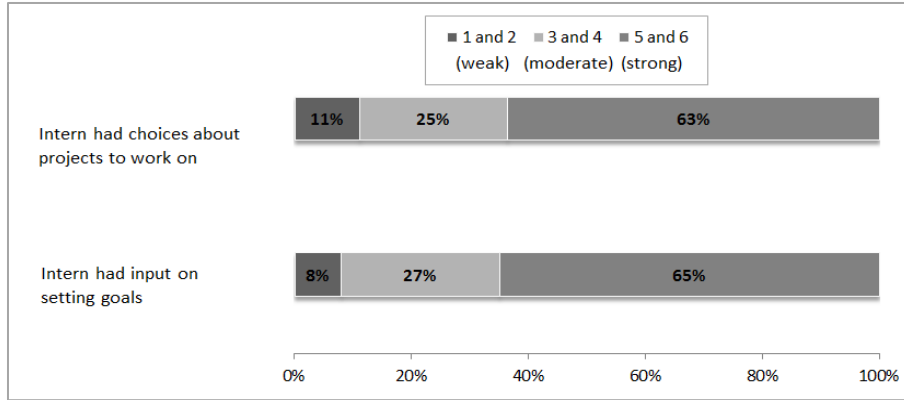


Figure K9. Achieve interns' responses on a scale of 1-6 on questions about opportunities for input and choice of tasks at their internships.

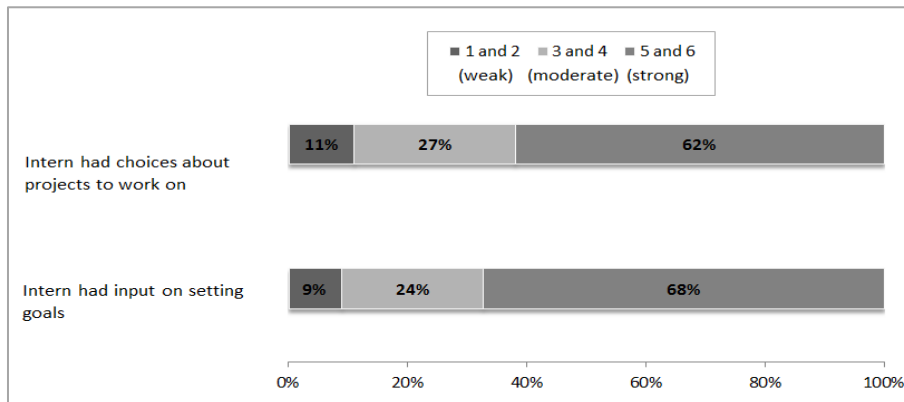


Figure K10. Discover interns' responses on a scale of 1-6 on questions about opportunities for input and choice of tasks at their internships.

Supervision. Questions about supervision asked about the frequency of experiences with their supervisor. The amount of time spent on supervisory activities varied across internships in both Achieve and Discover. Results are displayed in Figures K11 and K12 above. There was a spread in the frequency of meeting to *track work progress*. Among Achieve interns, a fifth to a quarter did so a few times, once a week, a few times a week, and daily. The spread was similar for Discover interns. There was also a spread of responses on the frequency of *feedback on performance*. A small percentage of Achieve (13%) and Discover (16%) said they got feedback never or once. The rest were fairly evenly distributed from a few times over the course of the summer to every day, with about a fifth to a quarter of the respondents getting feedback a few times over the summer, weekly, a few times a week or every day. More than four-fifths of Achieve interns and just over 3/4 of Discover interns *reflected on their accomplishments and*

learning with their supervisors or mentors at least a few times during the summer. Fewer interns, both Achieve and Discover, reported using the hirability skills to talk about their performance. Forty-six percent of Achieve interns and 40% of Discover interns never did so.

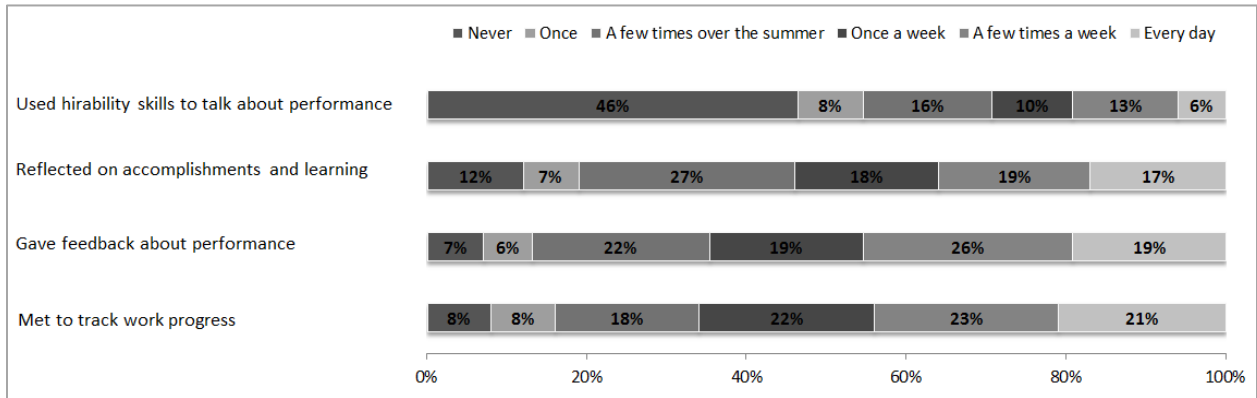


Figure K11. Frequency of experiences with supervisors as reported by Achieve interns.

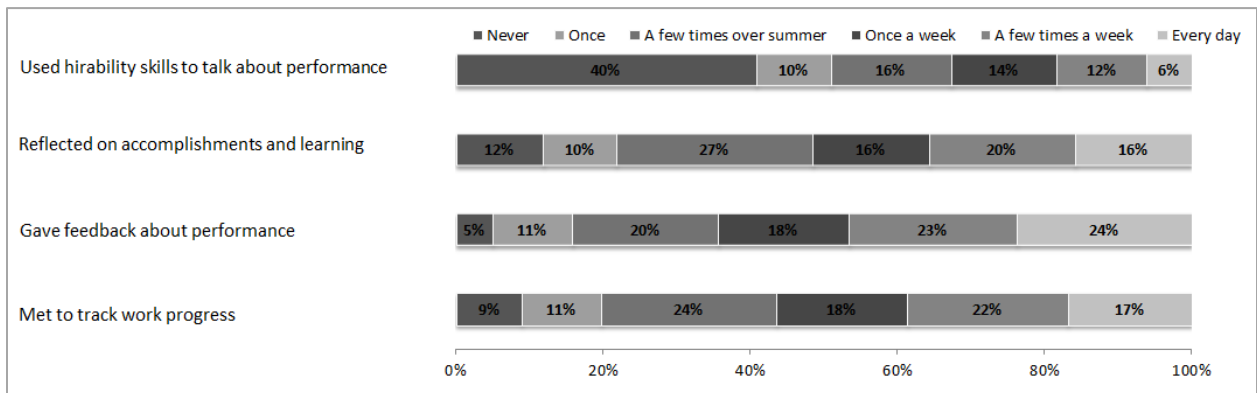


Figure K12. Frequency of experiences with supervisors as reported by Discover interns.

Supervisor Perspective. Structure/Orientation. Supervisors also responded to one question about structure and orientation—on the *use of a structured work plan with measurable goals*. Their responses showed that there was variation across internships in the extent to which interns had structured work plans with measurable goals. As shown in Figure K13 above, about two-fifths of Achieve supervisors gave strong ratings to this item and another two-fifths gave moderate

ratings. There was some misalignment here with the interns' responses (Interns—59% strong vs. Supervisors—44% strong). Just over half of Discover supervisors gave strong ratings to this item, whereas 61% of interns gave it a strong rating.

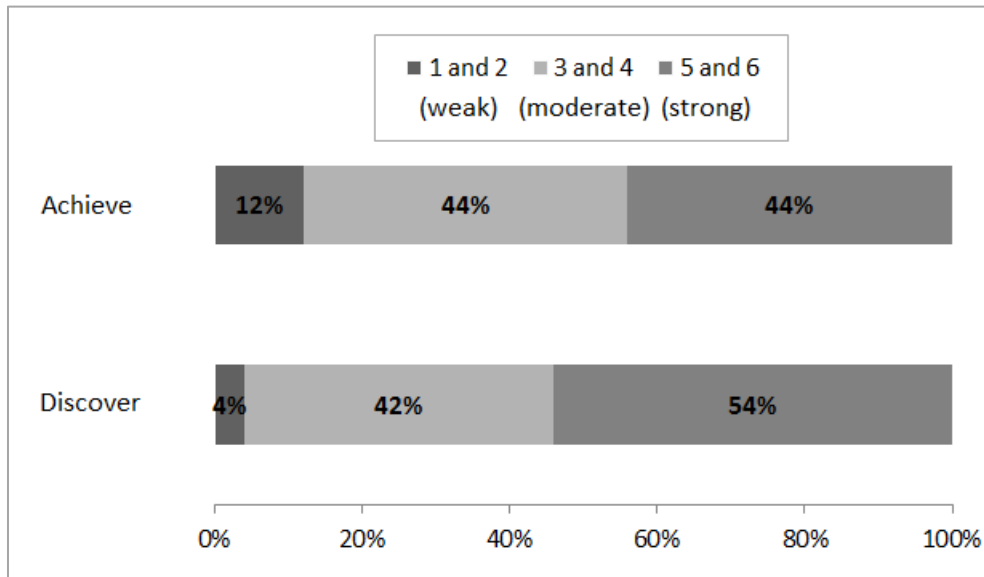


Figure K13. Supervisors responses about the extent to which interns had structured work plans with measurable goals.

Opportunities for learning. More than half of Achieve supervisors (57%) and Discover supervisors (57%) chose strong responses about having a *mix of short and long-term projects*. This aligned fairly closely with the interns' responses. Over two-thirds of Achieve supervisors and over three-quarters of Discover supervisors chose strong responses about *learning job-related skills*. While Discover interns and supervisors were aligned on their responses, Achieve interns gave stronger responses (79%) to this question than did supervisors (68%). As shown in Figure K14 below, there was a noteworthy discrepancy between the supervisors and the interns about *challenging tasks*. More than half of Achieve supervisors (54%) gave strong ratings, whereas 43% of interns did. The differences between Discover supervisors and interns were greater. Sixty percent of Discover supervisors gave strong ratings; only 37% of interns did. On opportunities to *learn about a career in the field*, about 4/5 of Achieve supervisors said interns had experiences at least a few times over the summer; this was about the same as interns' responses. About 3/4 of Discover supervisors said interns had such experiences; the interns' responses were fairly close in their responses.

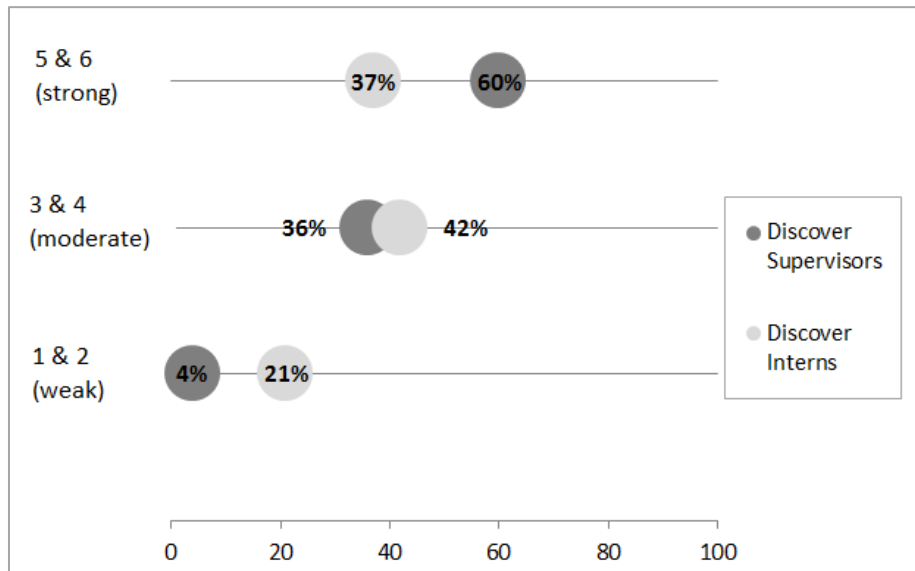
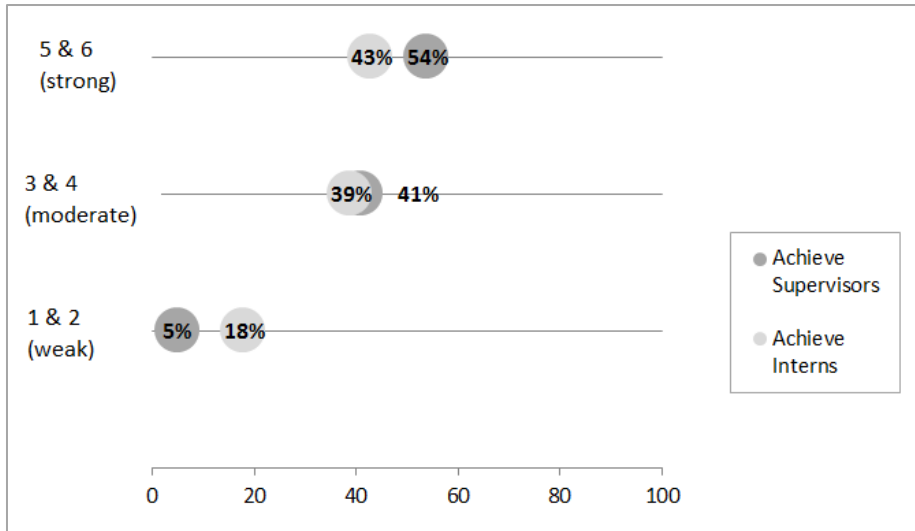


Figure K14. A comparison of interns' and supervisors' responses to how challenging tasks were at their internships.

Supervision. In the 2016 end-of-summer survey, supervisors were asked to estimate the amount of time they spent in a typical week on a number of activities: teaching job-related skills, giving feedback, doing check-ins, talking about the career field, and developing or reviewing the intern’s work plan. More than half of Achieve supervisors and two-thirds of Discover supervisors spent an hour or more each week teaching job-related skills to their interns. About three-fifths of all supervisors spent 15-45 minutes weekly developing or reviewing work plans, 15-45 minutes weekly giving feedback to their interns⁶⁶, 15-45 minutes weekly talking about the career field, and 15-45 minutes weekly checking in with their interns.

As shown in Figure K15, even more supervisors than interns reported not using the hirability skills in giving feedback to their interns. More than half of Achieve (55%) and Discover (55%) supervisors said they never used the framework with their interns.

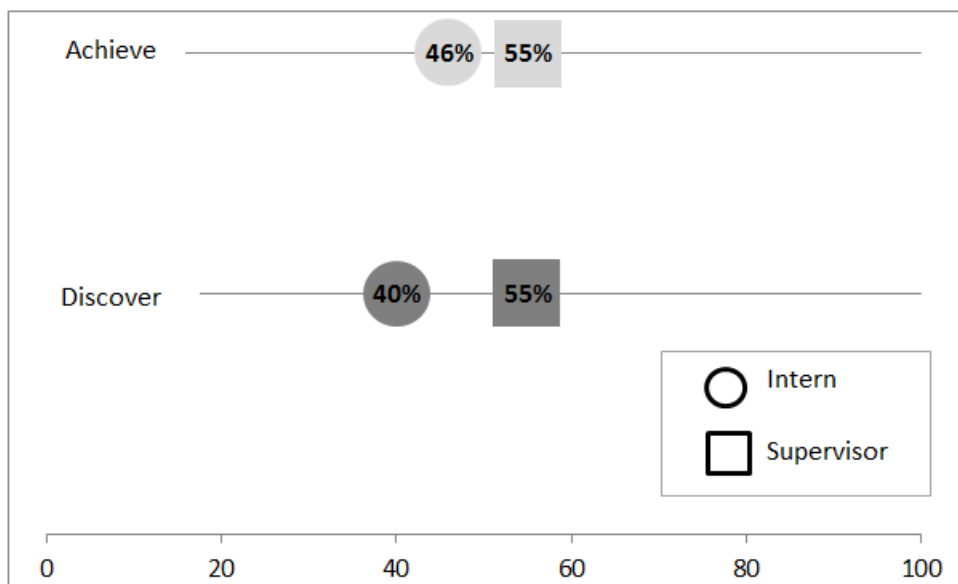
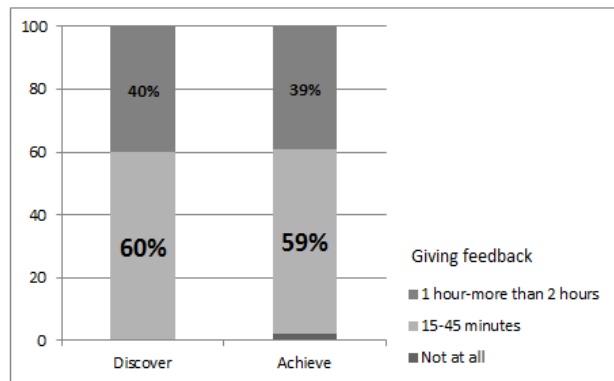
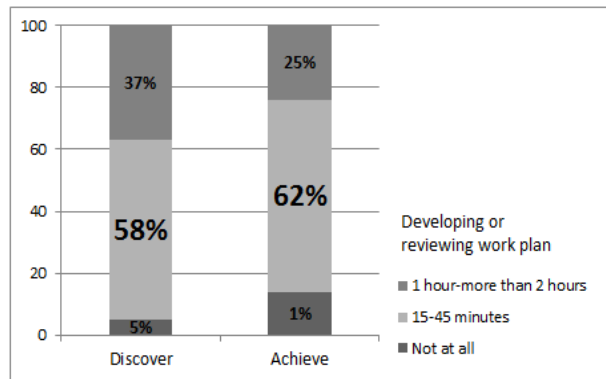
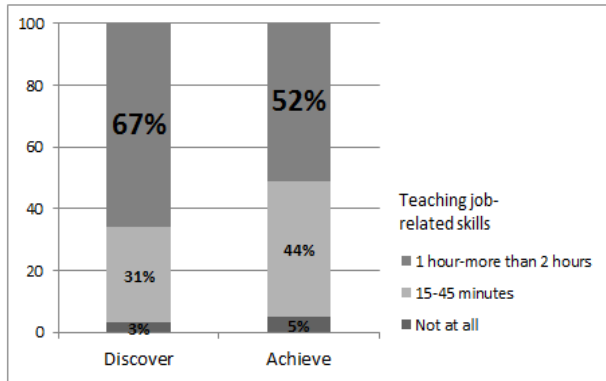
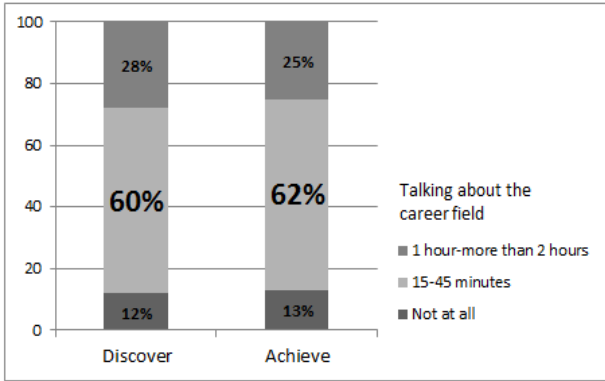
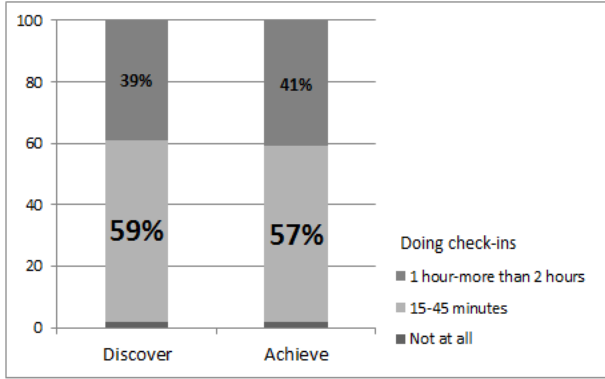


Figure 25. Percentages of interns and supervisors who reported NOT using the Hirability Skills framework in feedback to interns.

⁶⁶ The majority of Achieve supervisors reported *giving feedback* to their interns a few times over the summer or once a week. Nearly a third gave feedback a few times a week or every day. There was a discrepancy between what supervisors and interns reported about frequency of feedback. Achieve interns reported getting feedback more frequently; close to half (45%) said they got feedback a few times a week or daily. Half of Discover supervisors also reported giving feedback to their interns a few times over the summer or once a week. Nearly half of Discover interns (47%) said they got feedback a few times a week or daily.

Time with Supervisor in a Typical Week (Data source: End-of-Summer Supervisor Survey)





Appendix L

Program Satisfaction

Training: Intern Perspective

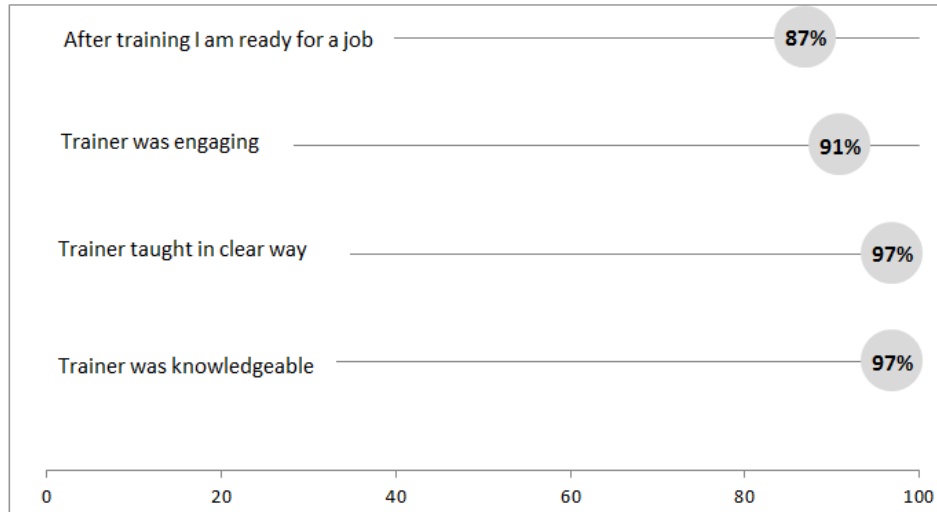


Figure L1 Ratings of training by MS Discover participants. This figure illustrates the percentage of students who agreed or strongly agreed with statements about training.

MS Discover. Approximately 316 MS Discover students completed a post-training survey. Figure L1 displays their highly favorable ratings of the training experience. Nearly all participants (97%) reported that their trainers were knowledgeable about the topics covered during training, that the trainer taught the lessons in a way that was clear (97%), that the trainer taught the lessons in a way that was engaging (91%). Eighty-seven percent agreed or strongly agreed that after the training they were ready for a job.

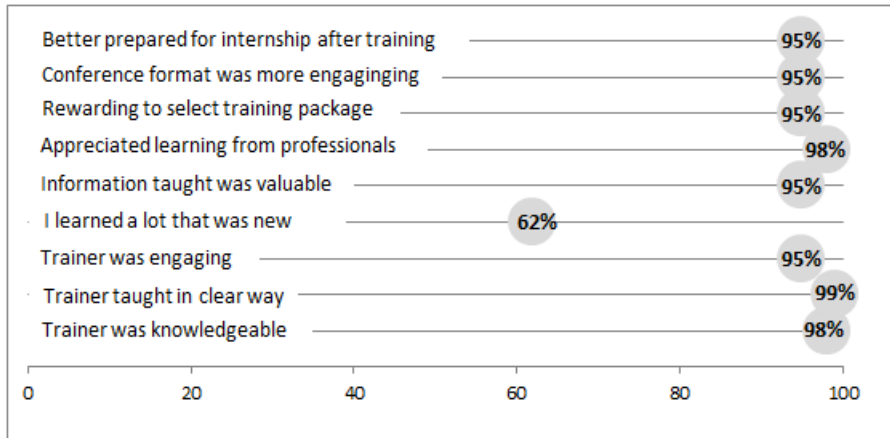


Figure L2. Ratings of training by Advanced participants. This figure illustrates the percentage of students who agreed or strongly agreed with statements about training.

Advanced. Approximately 135 students completed a post-training survey for the special Advanced training. Figure L2 displays their ratings of the training experience. Nearly all participants (98%) reported that their trainers were knowledgeable about the topics covered during training, that the trainer taught the lessons in a way that was clear (99%), that the trainer taught the lessons in a way that was engaging (95%). There was a split among students about the novelty of the material presented in training—62% said a lot was new and 39% said it was not. Still, 95% found the information taught valuable.

In response to questions about the relatively new way of delivering training for Advanced interns, 98% of participants appreciated learning from professionals from businesses who hire STEP-UP interns and 95% found the opportunity to select their training package made training more rewarding. Comparing the conference-style training to previous STEP-UP trainings, 95% agreed that the conference format was more engaging. In conclusion, 95% said they felt better prepared for an internship after the training.

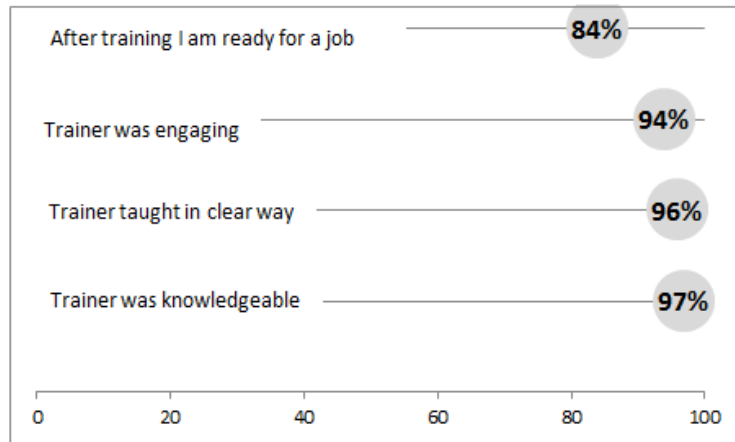


Figure L3. Ratings of Training by HS Discover and Achieve participants. This figure illustrates the percentage of students who agreed or strongly agreed with statements about training.

Achieve & HS Discover. Achieve and High School Discover training were conducted by AchieveMpls in the same location. The Achieve/HS Discover training had 1,462 students respond to the post-training survey. Figure L3 displays their ratings of the training experience. Nearly all participants (97%) agreed that their trainers were knowledgeable about the topics covered during training, that the trainer taught the lessons in a way that was clear (96%) and engaging (94%). Eighty-four percent agreed or strongly agreed that after the training they were ready for a job.

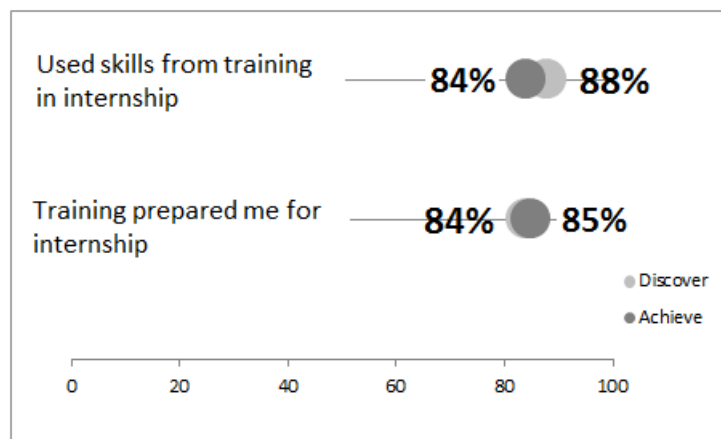


Figure L4. Percentages of interns who agreed or strongly agreed about training.

As shown in Figure L4 above, at the end of the end of the summer Achieve and Discover interns agreed or strongly agreed that training helped them in their internships. As shown in Figure 10 above, at the end of the end of the summer Achieve and Discover interns agreed or strongly agreed that training helped them in their internships. In response to a question about the extent to which training prepared them for their summer job, 85% of Achieve interns who responded to the survey ($n = 469$) agreed or strongly agreed that the training prepared them as did about 84% of Discover interns who responded ($n = 401$). In reflecting on the extent to which they used the skills learned in training at their jobs, 84% of Achieve interns who responded to the question ($n = 470$) said they used the skills from training in their jobs as did about 88% of Discover interns who responded ($n = 403$). It should be noted that both HS and MS Discover students responded to the Discover survey but participated in different trainings.

Intern Suggestions for Improving Training

In the end of summer survey, students mentioned training in the open-ended comments, especially when asked for their suggestions about improving the program. Most frequently the interns recommended that the training be shortened. Among the other suggestions were:

- Change (or eliminate) requirements for training for youth who have had internships before
- Continue training during the summer so interns can get support they need
- Provide real scenarios for role play
- More hands-on experiences, including resume and cover letter writing, other professional writing
- Match interns one-on-one with previous interns
- Provide more training for specific jobs
- Increase the number of people who come in to talk about their jobs and careers
- Extend the training hours over more days

In many of the open-ended comments from Discover interns, it was difficult to differentiate whether these comments applied to the weekly classes during the summer or to the spring training sessions.

Internships: Intern Perspective

Exposure

Discover interns who had previous experience with the program were asked about the change in the number of hours per week they could work. Of the 90 interns who responded to the question, nearly three-quarters preferred last year's hours (up to 30 per week).

Supervisors

Four hundred forty-five Achieve interns and 358 Discover interns responded to a question about the likelihood of staying in touch with their supervisor or mentor after the summer. As shown in Figure L5 below, Achieve interns were more likely to stay in touch with their supervisors or mentors (47% Achieve vs. 38% Discover were likely or very likely to stay in touch). While quite a few interns in both groups were not sure about keeping in touch (45% Discover, 42% Achieve), few were not likely to stay in touch (12% Discover, 8% Achieve) or not interested in staying in touch (5% Discover, 4% Achieve).

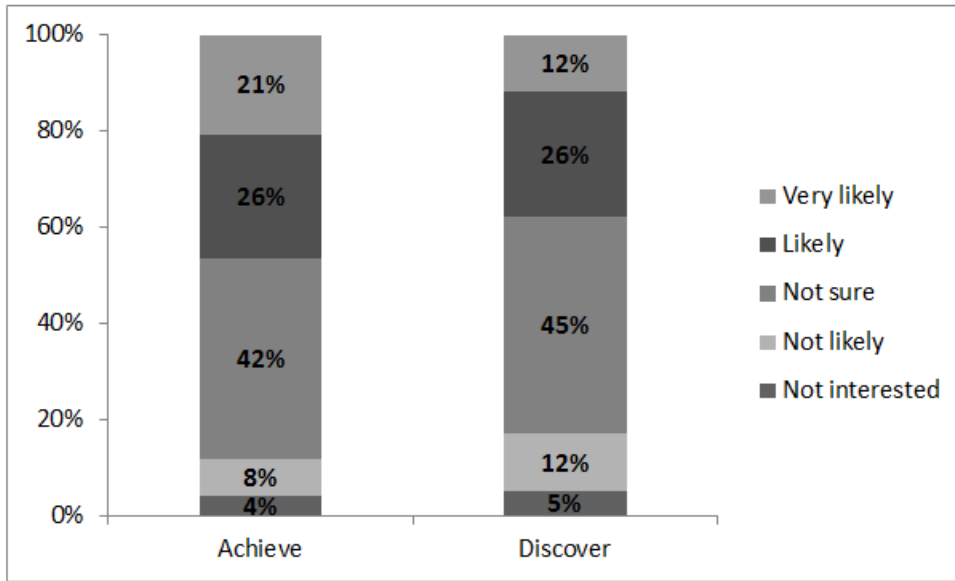


Figure L5. Likelihood of staying in touch with STEP-UP supervisor.

Support from STEP-UP

The one form of support from STEP-UP that interns were asked about on the end-of-summer survey was the weekly emails that were sent to Achieve and Discover interns to provide important information. Most interns read emails from STEP-UP at least occasionally, defined as 1-3 times over the course of the summer. A larger proportion of Achieve interns read emails weekly (32%) than Discover interns (19%).

Benefits

Interns reported on learning of various kinds ranging from the personal to the professional.

On a personal level, interns commented on discoveries they made about themselves. One Achieve intern wrote, “I learned that I already had valuable assets.” Another mentioned uncovering strengths and weaknesses, or, as one intern called them, “opportunities.” Another said that by learning what she enjoyed and what she didn’t, it helped her plan for the future.

Interns noted the development of character traits and social skills. These included staying calm under stress, communication, teamwork, being assertive, taking criticism, time management, perseverance, patience, being responsible, talking to people whom you don’t know, and handling conflict. One wrote, “. . . I have grown as a person. I am more outspoken and confident. Also a much better self-advocate.” Repeatedly, interns commented on learning to work with people from different cultural backgrounds. One intern concluded, “I got to learn skills that are useful not only at work, but in daily life as well.” Some of the lessons learned were not easy ones. An intern wrote, “I have also faced challenges that one could experience within the workplace. Through STEP-UP I have also learned that not everyone that you work with will be respectful towards nor mature about situations. However, you have to stay open-minded.”

Another kind of learning involved the acquisition of work-place specific skills like photography, conducting a SWOT analysis, and working with children. Their professional learning focused on the knowledge, skills, and mindset required in nearly every work place. These included things like working as part of a team, working independently, and writing and speaking in a professional setting. One intern wrote, “I have benefited by learning how a real workplace works together and communicates with each other.” They learned about workplace practices and culture: how to interview for a job, creating a resume, what to expect from a job, the value of networking, how to dress for work, punctuality. One intern said, “I was able to learn new skills such as learning the professional way to talk to people, how to write appropriate emails, and make a professional voicemail.”

A number of respondents mentioned learning about the particulars of different career paths and industries. One intern’s comment reflected the kind of insight gained from direct experience, writing, “I received an inside look in the hospital, and what goes on behind the scenes.” Another said, “I’ve gotten a real look at how a law firm operates, and I’ve gotten experience that a 16-year old can’t find anywhere else.” They found that their summer jobs opened up their thinking about potential careers, and also helped them clarify things they do *not* want to do. It allowed them to uncover their interests and capacities they were not aware of. One intern wrote, “I learned new things about myself and I also discovered what I want to do for my future because of my job.” Another commented about the way STEP-UP helped test and clarify interest in a

particular field saying, “This summer job gave me the opportunity to see if teaching is a career path I would want to consider and it gave me the opportunity to see how I would be as a teacher. I loved working with the children and I love how I was able to be involved in their learning and I got to see them make progress each day which was wonderful. It gave me the experience I wanted and it helped me a lot.”

Many wrote about developing relationships during the internship experience with peers as well as with adults who served as co-workers and supervisors. They appreciated the social aspects of their experience as well as the value of these networks for the future. Interns commented about having people who are guiding and supporting them. One said, “participating in the STEP-UP program helped me establish a network of people who I can ask any advice about my personal/professional life.” Another, commenting about the chance STEP-UP gave to broaden one’s professional network, said, “Who would ever [have] thought the CEO of U.S. Bank will know you by name!”

One benefit that ran through many of the interns’ comments was about making money. Beyond earning money, interns learned to value it, to budget it, to manage it and to save it. Interns reported on using it to help support family and to purchase clothing and other things they needed. Comments about money were especially frequent among Discover interns. A summary of perceived benefits appears in Figure 32 below.

Intern Suggestions for Improving Internships

The end of summer survey asked interns for suggestions on how to improve the STEP-UP program for suggestions related to training and classes. Many comments said they like the program as it is and didn’t make suggestions. There were numerous interns who did suggest ways to improve the program.

Placement. Regarding the placement process, several interns suggested that there be more varied job opportunities and more jobs to accommodate more interns each year, and greater choice for students about their work placement. Some wished that they were informed earlier about whether or not they got a job. Others wanted jobs better aligned with their interests. Discover interns thought clearer job descriptions would be helpful.

Hours. Many students expressed a desire for more work hours each week and over the course of the summer. Many Discover interns, in particular, commented about more hours. Along with comments on more hours were requests for better pay.

Programming. Several interns suggested that the program should organize and provide opportunities over the summer for interns to come together with others to talk about their job experiences. Others suggested adding social programs for interns.

Supervision. A few interns said their supervisors could have been better prepared with work for them to do. Others said they would have liked more contact and feedback from supervisors. Others talked about having more clarity about what the job would or could involve with greater specificity about tasks and responsibilities.

Internships: Supervisor Perspective

Time Commitment. In the end-of-summer survey, supervisors were asked how the actual time they spent training and supervising interns compared to the time they expected to spend. As Figure L6 shows, the majority of supervisors in both Achieve and Discover spent about the same amount of time supervising interns as they expected. Among Discover supervisors who responded to the survey, 70% said the actual time was about what they expected; among Achieve supervisors who responded to the survey, 64% said that the actual time was about what they expected. About 20% of Achieve supervisors and 21% of Discover supervisors found the actual time they spent working with interns was more time than they expected.

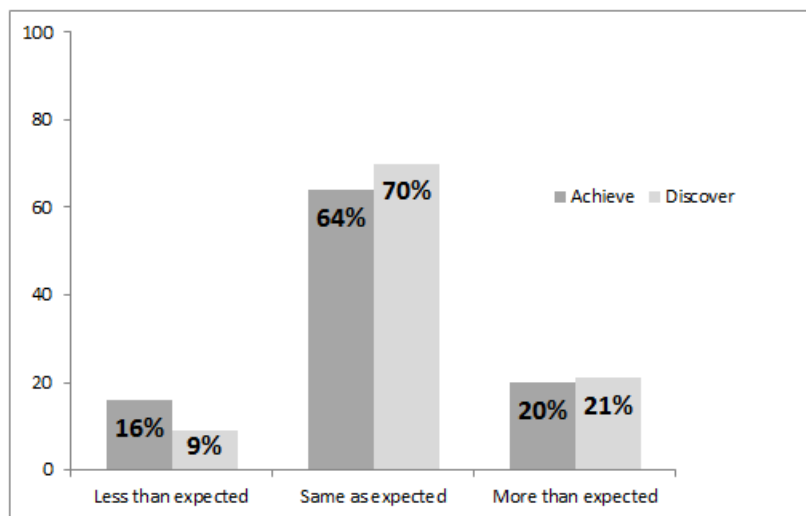


Figure L6. Percentages of supervisors who spent the amount of time they expected supervising interns.

Support from STEP-UP. Supervisors responded to questions about various forms of support provided by the program staff.

Supervisor Orientation. One hundred seventy-four Achieve supervisors responded to questions on the end-of-summer survey about the supervisor orientation, and the vast majority found the supervisor orientation to be helpful in many aspects. Half of them found the orientations moderately helpful for *preparing* for the internship (49%) and another 41% found it very helpful. A little over half (53%) found their orientations moderately helpful for *supervising* their interns over the summer and about a third (33%) found it very helpful.

Of the Discover supervisors, 88 responded to questions about their orientation. Most of them found the orientations moderately helpful (45%) or very helpful (47%) for preparing for the internship. Half the supervisors (49%) found their orientations moderately helpful for supervising their interns over the summer and another 40% found it very helpful.

Job Coaches (Achieve staff members) and Monitors (Discover staff members). During the summer job coaches (Achieve) and monitors (Discover) oversaw internships and checked in with supervisors. Supervisors from both Discover and Achieve reported high levels of support from these staff members during the summer. Among Discover supervisors, 88% of Discover supervisors who responded to the question ($n = 89$) said responses from monitors were timely. Among Achieve supervisors who responded to the question ($n = 175$), 94% said responses from coaches were timely. In response to how helpful the coaches and monitors were, 90% of Discover supervisors and 98% of Achieve supervisors found them to be helpful.

Handbook/Tools. More than 4/5 of Discover supervisors (84%) used the handbook provided by STEP-UP. When asked what they found helpful, the most frequent answers were dates and contact information and information about timesheets and the payroll process. Other mentioned expectations, tips for working with interns and preparing for the first day. In response to the question about what could be added to the handbook to make it more helpful there was a range of suggestions including and Frequently Asked Questions section, more information about the classes the interns take, skills to work on with the interns, blank copies of forms, and a list of whom to contact for different types of questions/issues.

Fewer Achieve supervisors reported using the handbook—59%. For those who used it the most frequently mentioned components were hirability skills and goal setting, logistics and dates, templates, guidelines for coaching and giving feedback, ideas for keeping the intern engaged, and work planning information. In response to the question about what could be added to the handbook to make it more helpful, suggestions included having a section on working with interns with special needs, case examples, more on providing constructive feedback, whom to contact for different issues, a printable timesheet, and simplified forms.

Supervisors were asked about the tools provided by STEP-UP to use with their interns including the MHA Labs Hirability framework. As reported above, many supervisors did not use the framework. Figure L7 shows that among those who did use the framework, nearly half found the tool moderately helpful.

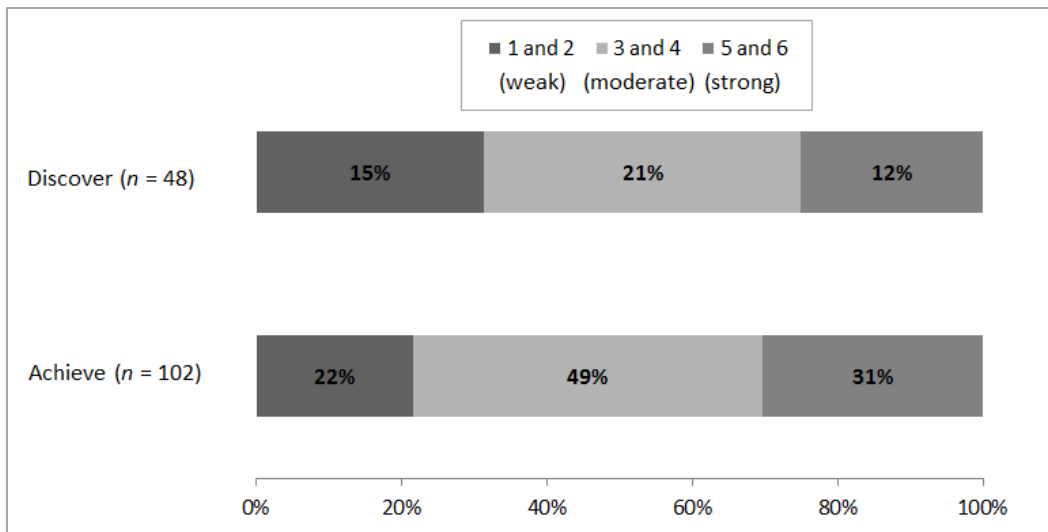


Figure L7. Supervisors’ responses on a scale of 1-6 to how helpful they found the MHA Labs Hirability Skills framework.

Emails. In 2016 the Achieve and Discover weekly emails to supervisors included different material. Both contained a section on requests and reminders; both groups of supervisors found that section the most valuable.

Supervisor Suggestions for Improving Internships

In response to, “What suggestions do you have for how the program could be improved in the future,” 175 supervisors wrote comments. Many said the program was great and they had no suggestions. Several themes emerged from the other comments.

As in the 2015 survey, many supervisors commented on the importance of a good fit of students with the skills required in the internship; this was more frequently mentioned by Achieve supervisors. Others commented on improving the alignment between the interns’ interests and the job assigned to him/her. Supervisors in both programs expressed interest in having some involvement in selecting their interns.

Regarding training, a number of comments addressed how to improve intern preparation. Supervisors requested better training in “soft skills” like work ethic and reliability and hard skills like professional writing. Other comments suggested that more training and networking opportunities be available to supervisors and interns throughout the summer. A few of the Achieve supervisors requested site visits from STEP-UP staff during the summer.

There were comments about improving communication and support from STEP-UP program staff—more checking in by the associates to see how things are going and providing more

support to supervisors. Discover supervisors requested that clearer information be provided earlier about the number of interns assigned to their site.

Among Achieve supervisors there were comments about streamlining communication (emails) and documents (hirability skills materials, check-ins). Someone in a law firm commented that these documents were geared to a corporate setting and could be made more flexible for other settings.

Some of the suggestions addressed logistics. Among Discover supervisors there were numerous requests for streamlining the process of paying interns by having online submission of timecards/payroll.

Suggestions from Participants for Program Improvement: Interns

Training

- Change (or eliminate) requirements for training for youth who have had internships before
- Continue training during the summer so interns can get support they need
- Real scenarios for role play
- More hands-on experiences, including resume and cover letter writing, other professional writing
- Match interns one-on-one with previous interns
- More training for specific jobs
- Increase the number of people who come in to talk about their jobs and careers
- Extending the training hours over more days

Internships

- More jobs, more varied opportunities, more hours, better pay
- Greater choice for students in their placements
- Opportunities over the summer to come together with others to talk about their job experiences and/or to socialize

Suggestions from Participants for Program Improvement: Supervisors

Training

- More training in skills like work ethic and reliability
- More training in skills like professional writing

Internships

- Better alignment between interns' interests and skills and the jobs they get
- Opportunities for training and networking for supervisors and interns during the summer
- Streamline emails and documentation materials
- More checking in by program staff during the summer

Appendix M

ANCOVA: GPA in SY17, Controlling for GPA in SY16

Testing Assumptions

There was a linear relationship between SY16 and SY17 GPA's for both Achieve and Discover as assessed by visual inspection of a scatterplot. There was homogeneity of regression slopes as the interaction term was not statistically significant for either Achieve ($F(1,447) = 0.488$, $p = 0.485$) or Discover ($F(1,373) = 0.574$, $p = 0.449$). There was a violation of the assumption of normality but that can be tolerated due to the sample size. Table 2 presents the adjusted means for interns and matched students in SY17 when we controlled for GPA in SY16.

GPA SY17 (controlling for GPA SY16)

ACHIEVE	Adjusted Mean	Standard Error
Intern	2.805	.010
Matched	2.756	.012

DISCOVER	Adjusted Mean	Standard Error
Intern	2.732	.016
Matched	2.727	.019

Appendix N

Full Model Outputs: First Design (Comparison of Participants & Matches), Controlling for Prior Achievement

GPA: Achieve

Tests of Between-Subjects Effects

Dependent Variable: GPA_SY17_2dig_trunc

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	249.406 ^b	2	124.703	4540.377	.000	.953
Intercept	.938	1	.938	34.169	.000	.071
GPA_SY16_2dig_trunc	242.502	1	242.502	8829.388	.000	.952
PARTICIPANT	.258	1	.258	9.391	.002	.021
Error	12.304	448	.027			
Total	3760.966	451				
Corrected Total	261.710	450				

a. LEVEL = 1

b. R Squared = .953 (Adjusted R Squared = .953)

GPA Discover

Tests of Between-Subjects Effects

Dependent Variable: GPA_SY17_2dig_trunc

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	269.118 ^b	2	134.559	2379.042	.000	.927
Intercept	.002	1	.002	.031	.860	.000
GPA_SY16_2dig_trunc	267.188	1	267.188	4723.958	.000	.927
PARTICIPANT	.002	1	.002	.038	.845	.000
Error	21.154	374	.057			
Total	3100.670	377				
Corrected Total	290.272	376				

a. LEVEL = 2

b. R Squared = .927 (Adjusted R Squared = .927)

Attendance

Comparison of Rate of Attendance for Interns and Matched Students SY16 and SY17

		Mean % attendance SY16	SD	N	Mean % attendance SY17	SD	N
ACHIEVE	Intern	0.9495	0.0624	225	0.9294	0.0815	225
	Matched	0.9337	0.0721	136	0.9130	0.0946	136
DISCOVER	Intern	0.9508	0.0576	178	0.9370	0.0708	178
	Matched	0.9477	0.0582	111	0.9235	0.0890	111

Comparison of Attendance for Interns and Matched Students, Controlling for Attendance in SY16

		Estimate	Standard Error	z-value	p
ACHIEVE	Intercept	-5.31870	0.14593	-36.447	<2e-16 ***
	Attendance 16	8.41456	0.16073	52.352	<2e-16 ***
	Participant or not	0.07440	0.03162	2.353	0.0186*
DISCOVER	Intercept	-6.34490	0.19894	-31.894	<2e-16 ***
	Attendance 16	9.50747	0.21536	44.146	<2e-16 ***
	Participant or not	0.19654	0.03691	5.325	1.01e-07***

*Estimate –the estimated parameter is on the log odds scale.

**z – the Z statistic

Referrals

Level 1 = Achieve, Level 2 = Discover

Variables in the Equation

LEVEL			B	S.E.	Wald	df	Sig.	Exp(B)
1	Step 1 ^a	PARTICIPANT	.107	.583	.034	1	.854	1.113
		Yes or No to Referrals in SY16	1.469	.623	5.560	1	.018	4.346
		Constant	-3.860	.494	60.924	1	.000	.021
2	Step 1 ^a	PARTICIPANT	.382	.458	.695	1	.405	1.465
		Yes or No to Referrals in SY16	2.194	.432	25.838	1	.000	8.974

Constant	-3.439	.419	67.422	1	.000	.032
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a. Variable(s) entered on step 1: PARTICIPANT, Yes or No to Referrals in SY16.

Removals

Level 1 = Achieve, Level 2 = Discover

Variables in the Equation

LEVEL			B	S.E.	Wald	df	Sig.	Exp(B)
1	Step 1 ^a	PARTICIPANT	-.034	.629	.003	1	.957	.967
		Removals_Binary_SY16	2.180	.726	9.005	1	.003	8.844
		Constant	-3.957	.516	58.812	1	.000	.019
2	Step 1 ^a	PARTICIPANT	.027	.425	.004	1	.949	1.028
		Removals_Binary_SY16	2.000	.489	16.698	1	.000	7.385
		Constant	-2.831	.341	69.138	1	.000	.059

a. Variable(s) entered on step 1: PARTICIPANT, Removals_Binary_SY16.

Suspensions

Level 1 = Achieve, Level 2 = Discover

Variables in the Equation

LEVEL			B	S.E.	Wald	df	Sig.	Exp(B)
1	Step 1 ^a	PARTICIPANT	-.371	.509	.530	1	.466	.690
		Suspensions_Binary_SY16	2.499	.571	19.149	1	.000	12.168
		Constant	-3.352	.394	72.386	1	.000	.035
2	Step 1 ^a	PARTICIPANT	1.079	.426	6.405	1	.011	2.940
		Suspensions_Binary_SY16	2.535	.428	35.090	1	.000	12.619
		Constant	-3.314	.397	69.574	1	.000	.036

a. Variable(s) entered on step 1: PARTICIPANT, Suspensions_Binary_SY16.

ACT Composite Scores

Level 1 = Achieve, Level 2 = Discover

Tests of Between-Subjects Effects

Dependent Variable: ACT Scale Score - Composite

LEVEL	Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
1	Corrected Model	644.925 ^a	2	322.462	17.239	.000	.165
	Intercept	967.231	1	967.231	51.709	.000	.229
	GPA_SY16_2dig_tr unc	644.913	1	644.913	34.477	.000	.165
	PARTICIPANT	17.679	1	17.679	.945	.332	.005
	Error	3254.736	174	18.705			
	Total	53033.000	177				
	Corrected Total	3899.661	176				
	2	Corrected Model	343.545 ^b	2	171.772	10.750	.000
Intercept		192.173	1	192.173	12.027	.001	.194
GPA_SY16_2dig_tr unc		328.253	1	328.253	20.544	.000	.291
PARTICIPANT		3.206	1	3.206	.201	.656	.004
Error		798.908	50	15.978			
Total		15358.000	53				
Corrected Total		1142.453	52				

a. R Squared = .165 (Adjusted R Squared = .156)

b. R Squared = .301 (Adjusted R Squared = .273)

MCA Reading

Level 1 = Achieve, Level 2 = Discover

Tests of Between-Subjects Effects

Dependent Variable: READING SCALE SCORE

LEVEL	Source	Type III Sum of Squares	df	Mean Square	F	Sig.
1	Corrected Model	316.532 ^a	2	158.266	.752	.528
	Intercept	76976.851	1	76976.851	365.917	.000

	PARTICIPANT	3.341	1	3.341	.016	.906
	GPA_SY16_2dig_trunc	301.949	1	301.949	1.435	.297
	Error	841.468	4	210.367		
	Total	7369890.000	7			
	Corrected Total	1158.000	6			
2	Corrected Model	6677.918 ^b	2	3338.959	14.369	.000
	Intercept	10543164.980	1	10543164.980	45371.700	.000
	PARTICIPANT	188.328	1	188.328	.810	.370
	GPA_SY16_2dig_trunc	6637.865	1	6637.865	28.566	.000
	Error	28814.271	124	232.373		
	Total	137180379.000	127			
	Corrected Total	35492.189	126			

a. R Squared = .273 (Adjusted R Squared = -.090)

b. R Squared = .188 (Adjusted R Squared = .175)

MCA Math

Level 1 = Achieve, Level 2 = Discover

Tests of Between-Subjects Effects

Dependent Variable: MATH SCALE SCORE

LEVEL	Source	Type III Sum of Squares	df	Mean Square	F	Sig.
1	Corrected Model	1552.970 ^a	2	776.485	3.105	.054
	Intercept	4749828.324	1	4749828.324	18991.557	.000
	PARTICIPANT	38.157	1	38.157	.153	.698
	GPA_SY16_2dig_trunc	1530.608	1	1530.608	6.120	.017
	Error	12505.105	50	250.102		
	Total	67315118.000	53			
	Corrected Total	14058.075	52			
2	Corrected Model	1667.908 ^b	2	833.954	3.373	.062
	Intercept	1048480.271	1	1048480.271	4240.049	.000
	PARTICIPANT	15.157	1	15.157	.061	.808
	GPA_SY16_2dig_trunc	1207.772	1	1207.772	4.884	.043
	Error	3709.203	15	247.280		
	Total	23102716.000	18			

Corrected Total	5377.111	17		
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a. R Squared = .110 (Adjusted R Squared = .075)

b. R Squared = .310 (Adjusted R Squared = .218)

On track to graduate (credit-ready)

Level 1 = Achieve, Level 2 = Discover

Variables in the Equation

LEVEL			B	S.E.	Wald	df	Sig.	Exp(B)
1	Step 1 ^a	credtag_SY16	4.014	.446	80.840	1	.000	55.358
		PARTICIPANT	.988	.448	4.853	1	.028	2.686
		Constant	-.989	.395	6.268	1	.012	.372
2	Step 1 ^a	credtag_SY16	4.398	.489	80.766	1	.000	81.265
		PARTICIPANT	.926	.475	3.801	1	.051	2.525
		Constant	-1.563	.451	12.017	1	.001	.209

Appendix O

Employability Outcomes Analysis Using Wilcoxon Signed-Rank Test—Items with Statistically Significant Difference Pre-and Post

The first analysis of these data considered each survey item independently; statistical significance was determined by $p < .05$. Then they were corrected for multiple comparisons (.05/25 survey items = .002). After corrections for multiple comparisons, some pre to post differences were no longer statistically significant. Those are marked with an asterisk (*)

ACHIEVE

QUESTION	<i>N</i>	<i>z</i>	<i>p</i>	<i>r</i>
2. I bring energy and enthusiasm to the tasks I do. <i>pre>post*</i>	326	-2.147	.032*	.08
4. I stay calm under stress.	329	-4.022	<.001	.16
5. I accept criticism openly.	324	-4.114	<.001	.16
6. I actively look for additional tasks when my own work is done.	333	-3.391	.001	.13
8. I break problems into smaller parts in order to solve them.	333	-2.501	.012*	.10
17. When writing I can communicate in a professional way.	327	-2.261	.024*	.09
18. I can describe my skills and strengths on a professional resume.	331	-2.155	.031*	.08
19. I know what questions to expect in a job interview.	331	-4.770	<.001	.19
20. I know what questions are appropriate for me to ask during a job interview.	330	-3.865	<.001	.15
21. I can name two or more people I can ask for a professional reference.	320	-2.774	.006*	.11
24. I intend to continue my education following high school. <i>pre>post*</i>	317	-2.004	.045*	.08
26. I am hopeful about my future. <i>pre>post*</i>	320	-4.558	<.001	.18

*See below for comparisons of pre- to post

DISCOVER

QUESTION	<i>N</i>	<i>z</i>	<i>p</i>	<i>r</i>
2. I bring energy and enthusiasm to the tasks I do. <i>pre>post*</i>	362	-3.139	.002	.12
8. I break problems into smaller parts in order to solve them.	360	-2.297	.022*	.09
12. I get my work done on time.	363	-2.317	.020*	.09
14. I know what clothes to wear for work.	361	-3.168	.002	.12
15. When speaking, I can communicate in a professional way.	362	-3.474	.001	.13
17. When writing I can communicate in a professional way.	362	-3.210	.001	.12
18. I can describe my skills and strengths on a professional resume.	362	-2.799	.005*	.10
19. I know what questions to expect in a job interview.	361	-8.566	<.001	.32
20. I know what questions are appropriate for me to ask during a job interview.	363	-5.577	<.001	.21
21. I can name two or more people I can ask for a professional reference.	356	-4.937	<.001	.19
23. I can make a valuable contribution to a workplace.	351	-2.262	.024*	.09
26. I am hopeful about my future. <i>pre>post</i>	354	-4.177	<.001	.16

*See below for comparisons of pre- to post

Comparison of Agree/Strongly Agree Responses where pre>post, Achieve

Item	Pre (Agree/Strongly Agree)	Post (Agree/Strongly Agree)	<i>N</i>
Q2. I bring energy and enthusiasm to the tasks that I do.	89.4% 1.2% disagreed or strongly disagreed	84.3% 1.2% disagreed	326
Q24. I intend to continue my education following high school.	91% .9% disagree or strongly disagreed	94.1% .9% disagree or strongly disagreed	317
Q26. I am hopeful about my future.	91.7% .9% disagree or strongly disagreed	91.9% 2.2% disagree or strongly disagreed	320

Comparison of Agree/Strongly Agree Responses where pre>post, Discover

Question	Pre (Agree/Strongly Agree)	Post (Agree/Strongly Agree)	<i>N</i>
Q2. I bring energy and enthusiasm to the tasks that I do.	84.1% .3% disagreed or strongly disagreed	75.2% .3% disagreed	362

Q26. I am hopeful about my future.	94.2% No one disagree or strongly disagreed	93.4% .3% disagree or strongly disagreed	354
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Appendix P

Employability Analyses for Differential Experiences

Outcome variable is Decrease/No Change/Increase in self-rating on item

X = statistical significant difference among groups

QUESTION	Hours Per Week Worked (Kruskal-Wallis)	Weeks Worked (Kruskal-Wallis)	Multiple Years: Achieve (Chi-square)	Multiple Years: Discover (Chi-square)
Q2. I bring energy and enthusiasm to the tasks that I do.				
Q3. I take responsibility for my actions instead of blaming others.				
Q4. I stay calm under stress.				
Q5. I accept criticism openly.				
Q6. I actively look for additional tasks when my own work in done.			X	
Q7. I actively look for ways to help other people.				
Q8. I break problems into smaller parts in order to solve them.				
Q9. I think of several possible solutions to a problem.			X	
Q10. I identify better ways to solve problems.				
Q11. I manage my time well.				
Q12. I get my work done on time.	X			
Q13. I arrive on time.			X	
Q14. I know what clothes to wear for work.				
Q15. When speaking, I can communicate in a professional way.				
Q17. When writing, I can communicate in a professional way.				
Q18. I can describe my skills and strengths on a				

professional resume.				
Q19 I know what questions to expect in a job interview.			X	X
Q20. I know what questions are appropriate for me to ask during a job interview.				X
Q 21. I can name two or more people I can ask for a professional reference.				
Q22. I do not give up on tasks, even when I have trouble with them.				
Q23. I make a valuable contribution to a workplace.				
Q24. I intend to continue my education following high school.				
Q25. I know the education required for the work I am interested in doing.		X		
Q26. I am hopeful about my future.				

Hours per Week/Employability: I get my work done on time

Group	Decrease		No Change		Increase	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<10	2	25	3	37.5	3	37.5
10-15	3	14	14	64	5	23
16-25	2	6	17	47	17	47
26-34	6	25	11	46	7	29
35-40	10	29	20	57	5	14
>40	1	20	2	40	2	40

Weeks of Work/Employability: I know what education is required for the work I am interested in doing.

Group	Decrease		No Change		Increase	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
4 weeks	0	0	3	60	2	40
5 weeks	1	33	2	67	0	0
6 weeks	4	22	5	28	7	39
7 weeks	1	14	1	14	4	57
8 weeks	3	18	6	35	8	47
9 weeks	17	30	29	51	9	16
10 weeks	4	36	5	46	1	9
>10 weeks	4	33	8	67	0	0

One vs. Multiple Internships/Employability--ACHIEVE

GroupMultipleYears * Direction of Change Pre Post on Employability Q6 Crosstabulation

			Direction of Change Pre Post on Employability Q6			
			0	1	2	Total
GroupMultipleYears	1	Count	57	30	8	95
		% within GroupMultipleYears	60.0%	31.6%	8.4%	100.0%
	2	Count	21	11	12	44
		% within GroupMultipleYears	47.7%	25.0%	27.3%	100.0%
Total	Count		78	41	20	139
	% within GroupMultipleYears		56.1%	29.5%	14.4%	100.0%

GroupMultipleYears * Direction of Change Pre Post on Employability Q9 Crosstabulation

			Direction of Change Pre Post on Employability Q9			
			0	1	2	Total
GroupMultipleYears	1	Count	42	33	20	95
		% within GroupMultipleYears	44.2%	34.7%	21.1%	100.0%
	2	Count	22	6	14	42
		% within GroupMultipleYears	52.4%	14.3%	33.3%	100.0%
Total	Count		64	39	34	137
	% within GroupMultipleYears		46.7%	28.5%	24.8%	100.0%

GroupMultipleYears * Direction of Change Pre Post on Employability Q13 Crosstabulation

			Direction of Change Pre Post on Employability Q13			
			0	1	2	Total
GroupMultipleYears	1	Count	52	25	17	94
		% within GroupMultipleYears	55.3%	26.6%	18.1%	100.0%
	2	Count	25	4	15	44
		% within GroupMultipleYears	56.8%	9.1%	34.1%	100.0%
Total	Count		77	29	32	138
	% within GroupMultipleYears		55.8%	21.0%	23.2%	100.0%

GroupMultipleYears * Direction of Change Pre Post on Employability Q19 Crosstabulation

			Direction of Change Pre Post on Employability Q19			
			0	1	2	Total
GroupMultipleYears	1	Count	37	42	16	95
		% within GroupMultipleYears	38.9%	44.2%	16.8%	100.0%
	2	Count	22	10	12	44
		% within GroupMultipleYears	50.0%	22.7%	27.3%	100.0%
Total	Count		59	52	28	139
	% within GroupMultipleYears		42.4%	37.4%	20.1%	100.0%

One vs. Multiple Internships/Employability—DISCOVER

GroupMultipleYears * Direction of Change Pre Post on Employability Q19 Crosstabulation

			Direction of Change Pre Post on Employability Q19			
			Decrease	No change	Increase	Total
GroupMultipleYears	1	Count	13	31	52	96
		% within GroupMultipleYears	13.5%	32.3%	54.2%	100.0%
	2	Count	3	10	3	16
		% within GroupMultipleYears	18.8%	62.5%	18.8%	100.0%
Total		Count	16	41	55	112
		% within GroupMultipleYears	14.3%	36.6%	49.1%	100.0%

GroupMultipleYears * Direction of Change Pre Post on Employability Q20 Crosstabulation

			Direction of Change Pre Post on Employability Q20			
			Decrease	No change	Increase	Total
GroupMultipleYears	1	Count	20	37	40	97
		% within GroupMultipleYears	20.6%	38.1%	41.2%	100.0%
	2	Count	2	13	1	16
		% within GroupMultipleYears	12.5%	81.3%	6.3%	100.0%
Total		Count	22	50	41	113
		% within GroupMultipleYears	19.5%	44.2%	36.3%	100.0%