



Pilot Study Shows Positive Results in Soft Skill Development



Signal Success
Prepares Students
for Careers





Commonwealth Corporation, created by the Massachusetts Legislature in 1997, designs and executes workforce strategies in partnership with businesses, educators, and training providers across the state. Signal Success is a Commonwealth Corporation initiative designed to help teens and young adults bridge the gap between high school and workforce.

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Executive Summary

During the 2014- 2015 school year, three pilot sites enrolled 74 participants into an extensive program to understand the effectiveness of a new curriculum, Signal Success, as a comprehensive career readiness and exploration curriculum for school and community-based programs. Pilot sites agreed to deliver over 100 hours of the Signal Success curriculum and coordinated subsidized job placements and internship opportunities for participants.

Through a mix of participant surveys, student work samples, teacher surveys, employer surveys, and individual interviews, the pilot provided an opportunity to gather information about how the program helped participants develop key skills and increase work readiness and future planning. Besides identifying and measuring the gains of participants, the pilot also yielded clear information about how to improve the content of the curriculum and the corresponding implementation models. Below is a list of key findings from this pilot study:

- **Overwhelmingly participants who completed the Signal Success course achieved gains in the four core skill areas of communication, collaboration, dependability and initiative.** Ninety-six percent improved a full level in at least one skill and 75% improved a full level in two or more core skills. The participants who completed the condensed 15 hour version of the course still experienced gains in the core skills but at a smaller rate. Determining the most effective dosage for various program models is important to maximizing effectiveness.

- **Improvement in communication was related to other non-cognitive skills such as self-efficacy, ability to recognize emotions, self-monitoring and empathy.** Similarly, many students improved their collaboration skills by increasing their ability and willingness to take on a leadership roles-- a skill which is also intertwined with other non-cognitive skills like self-efficacy and motivation. In order to leverage greater improvements the curriculum needs to provide more practice and support with all of these overlapping skills.
- **Initially lower-skilled participants saw the largest gains.** On average, program completers saw a 1.8 improvement on a 5-point scale in core skills with initial deficiencies. These gains represent improvement in areas that would have otherwise diminished employability, such as the ability to arrive on time, complete tasks and communicate about challenges.
- **Students made employability strides by developing job readiness assets such as resumes and interviewing skills.** Nearly all the students reported learning something new about interviewing and how to act and communicate more professionally. Teachers observed these same gains reporting that nearly 98% made progress on their ability to make a professional impression. In the case of Malden HS, which was able to provide a follow-up employment rate, these new skills translated to 72% of completers being employed six months after the program even though more than $\frac{3}{4}$ were still attending high school.
- **Future planning and knowledge of career paths were areas of strong growth, with the opportunity for even more impactful development in the future.** Teachers reported that at the start of the course less than 2% of participants were able or very able to articulate the steps involved in a relevant career path, and by the end of the course this number rose to 60%. In order to move students beyond simply identifying possible careers to deeper exploration, it is important to integrate career exploration across more of the lessons.
- **Implementing Signal Success as part of school day instruction yielded a higher completion rate.** And non-completers were very similar to completers with the exception of being less likely on their baseline surveys to report that they knew what career interested them and that they had strong support networks. These results suggest that embedding the course into the school day and using the baseline survey to determine which students might benefit from extra support could improve completion rates. Additionally, some students left the program because they wanted to pursue better employment options, so while subsidized jobs can be a great part of the offering, it is important to encourage and support students who are interested and able to acquire competitive employment.

Introduction

This report describes the results of a pilot study designed to test the effectiveness of a career-readiness and career exploration curriculum developed for teens at high school and community-based programs. The findings offer an opportunity to look at noncognitive learning in practice and explore the types of skills that may be most relevant to success in school and work.

During the 2014-2015 school year three programs took part in the pilot program. Two of the pilot sites were large comprehensive urban high schools in the northeast region of Massachusetts; the third site was a Boston-based community organization. Programs were required to deliver at least 100 hours of career-readiness programming using the Signal Success curriculum; all programs offered corresponding subsidized work placement to support student learning and exposure to jobs and careers. Lowell High School provided job placements with the support of the Career Center of Lowell; Malden High School had an existing partnership with the Metro North WIB; and Sociedad Latina had employer partners for internships and subsidized placements.

SIGNAL SUCCESS CURRICULUM

Signal Success is a comprehensive workshop-based course designed to help teens and young adults develop skills to be successful at work, school, and in their future careers. The curriculum was developed by Commonwealth Corporation, a quasi-state workforce development and training agency, in response to a statewide research project on employers' hiring preferences in the entry-level job market.¹

The research findings suggested that employers are reluctant to hire teens because of perceived inferior work behaviors and soft skills. Additional research indicates that even in the case of career and technical students, employers would still like to see stronger development of soft skills.² Many of the same skills that employers are looking for have been shown to lead to greater perseverance in high school and post-secondary educational settings.³

Skill development in the Signal Success course is focused on four areas employers in the Commonwealth Corporation study identified as key requirements of entry-level occupations, but these skills have also been documented as important across all levels of employment. The four skills are dependability, communication, collaboration, and initiative. The development of these core skills is often dependent upon additional non-cognitive abilities such as self-monitoring, self-efficacy and conflict resolution--all of which are also layered into the curriculum. Lessons are designed so that participants gain new knowledge on the world of work and careers--and of themselves; have opportunities to build supporting skills; and are encouraged to experiment, practice and reflect on their behavior.

¹ Paul Harrington and Nancy Snyder, "Signaling Success: Boosting Teen Employment Prospects," Commonwealth Corporation and Drexel University's Center for Labor Markets and Policy, 2013

² Catherine Tumber et al., "The Critical Importance of Vocational Education in the Commonwealth," Northeastern University, January 2016.

³ Camille Farrington et al. "Teaching Adolescents To Become Learners, The Role of Noncognitive Factors in Shaping School Performance: Critical Literature Review," The University of Chicago Consortium on Chicago School Research

CURRICULUM DEVELOPMENT

The Signal Success curriculum was developed in alignment with evidence-based benchmarks in youth career development in addition to research on employer expectations and preferences in hiring teens and young adults. The standards or benchmarks include the MA Career Development Education (CDE) Benchmarks, the MA Career and Vocational Technical Education (CVTE) frameworks, and the Common Core College and Career Readiness Anchor Standards.

In the three years since its initial development, the curriculum has been refined by working closely with teachers and community-based organization staff who participated in the program pilot. As a result, we have optimized active participant engagement and learned how to best meet the needs of different student groups including English language learners; special needs students; over-age and under-credited youth; as well as students ready for more intensive career development in both comprehensive high schools and career vocational schools.



Signal Success is a comprehensive curriculum designed to meet the needs of a diverse array of learners.

USAGE AND IMPLEMENTATION

Since 2013, the curriculum has grown from a short 15-hour course used in YouthWorks, a seven-week subsidized summer employment program, to a comprehensive offering (180 curriculum hours) with adaptations for different school and community-based program and participant needs. To date, in partnership with more than 50 organizations and schools, over 18,500 young people have used Signal Success across Massachusetts.

In addition to developing the curriculum, Commonwealth Corporation has also introduced a thorough technical assistance and capacity-building model. Within the YouthWorks program, practitioners of the curriculum attend full-day trainings twice a year, participate in professional learning communities and receive individualized coaching. School and community based partners participate in a needs--assessment process which leads to a customized curriculum, training and assessment plan. Teachers receive an initial training and then access ongoing support in the form of co-teaching, instructional coaching and additional curriculum customizations. Through intensive initial support, teachers and administrators build the capacity to support ongoing use of the curriculum.

THE PILOT STRUCTURE

During the 2014-2015, three programs participated in a pilot study to test the effectiveness and viability of Signal Success as a comprehensive career readiness and exploration curriculum for school and community based programs.

Staff from all the programs participated in a comprehensive training on how best to implement Signal Success. Programs then received ongoing support in the form of co-facilitation, coaching and curriculum consultation. In addition to being trained on the curriculum, staff also received training on

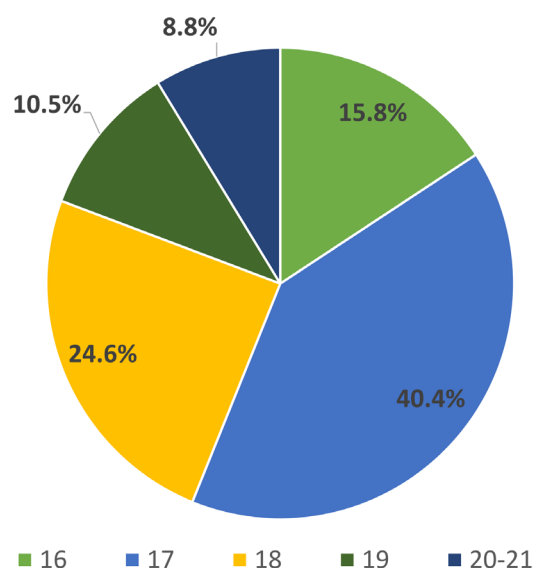
best practices for utilizing the various assessment tools. In order to support the fidelity of the model, Commonwealth Corporation provided ongoing technical assistance and feedback about recruitment and program design. Sites provided bi-weekly updates for the first three months of the program and then monthly updates once enrollment stabilized. The chart below summarizes the three sites.

Pilot Site	Participants Recruited	Participants Enrolled	Participants Completing	Average hours of curriculum (of completers)	Program Model
Lowell High School	21	21	19	83.2	Credit bearing 7th period elective course. Held 5 days a week for the first 6 weeks and then 3 times a week during work placements. About 1/3 of the class were ELLs.
Malden High School	30	25	21	97.7	After-school program. First six of the workshops were considered a “tryout” to get into the program. Recruited 1/3 ELL students, 1/3 SPED, 1/3 general education students.
Sociedad Latina	32	28	17	120.1	After-school program that met more intensively in the beginning of the year and then once a week during placements. The majority of the students came from homes where English was not the first language.
Across all 3 sites	83	74	57	99.5	

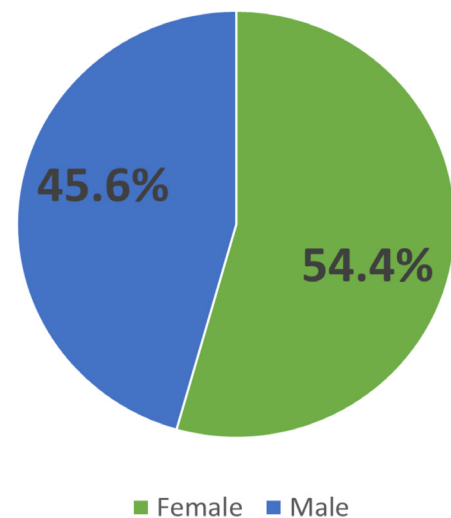
THE PILOT PARTICIPANTS

All of the program participants were eligible for free or reduced lunch. Programs committed to recruiting students from various academic and skill backgrounds and did their best to maintain an even gender balance. Since it is extremely hard to provide younger students with work placements, programs focused recruitment largely on high school seniors with the exceptions of juniors from Malden High School and older participants at Sociedad Latina.

Participants by Age at the Start of the Program



Participants by Gender



Methodology and Limitations

Several methods were used to collect data about skill gain and short-term participant outcomes. These included student surveys, competency-based student portfolios, one-on-one exit interviews with a sample of students, attendance and program completion data, teacher surveys, and employer surveys.

Students completed baseline surveys which captured attitudes related to self-efficacy, skills and future careers. While some of the measures on this baseline survey were paired with corresponding end-of-course survey questions, we did not use the initial survey to have students self-rate their core skills. Piloting of earlier pre and post survey tools with YouthWorks participants demonstrated that youth struggled to accurately assess skills at the start of programs because they often did not have enough context. For example, students tended to rate themselves as highly skilled and then once they were exposed to actual work settings and more challenging classroom components, their self-assessment scores would go down.

In order to address this issue of response shift bias⁴, we had students rate themselves using a retrospective post then pre scale that asked them to compare their skill level at the end of the course to what it was like prior to the course. While retrospective post then pre scales have the limitation of relying on memory, as in other documented cases, this method produced results that more closely reflected the skill gain shifts observed by program staff.⁵

Teachers of the course were also asked to complete surveys that rated students' skills and abilities at the beginning and the end of the course. The teacher survey assessed the same core skills but included sub-statements, which captured greater detail about the components of skills. Due to the integrated design of the program, the instructors surveyed also had knowledge of how students performed in subsidized job placements. Comparisons between students and teacher scoring of core skills produced generally high levels of agreement about whether or not progress was made. For example, averaged across all four skills, when students identified that they had made a skill gain, 88.8% of the time their teachers also observed that they had made progress in that core skill. The size of skill gains was variable, but this is to be expected given that difference in perspective and the fact that teachers were using a more sensitive instrument.

Employers were also asked to rate students at least twice using the Massachusetts Work Based Learning Plan (WBLP)⁶ or a similar tool, but the employer response rate was inconsistent from site to site and lower than teacher and student survey completions.

In addition to surveys, students also completed competency-based portfolio measures to capture student learning. These portfolios were scored with a normed rubric by staff who were not directly involved in student instruction. At each site, at least 25% of completers took part in one on one exit interviews. These exit interviews provided opportunities to gather insights into the student experience. Exit interviews along with combined post teacher and student surveys also provided information about participants' employment and education plans at the end of the program.

⁴ Howard, G. S. (1980). Response-shift bias a problem in evaluating interventions with pre/post self-reports. *Evaluation Review*, 4(1), 93-106.

⁵ Howard, G.S., Millham, J., Slaten, S., & O'Donnell, L. (1981). Influence of subject response-style effects on retrospective measures. *Applied Psychological Measurement*, 5, 144-150.

⁶ <http://skillspages.com/masswbl/>



“ Before this program, I really wasn’t sure what I wanted to do. The classes helped me explore my options and figure out that I want to be a hotel manager because it is a good match for my interests and skills.”

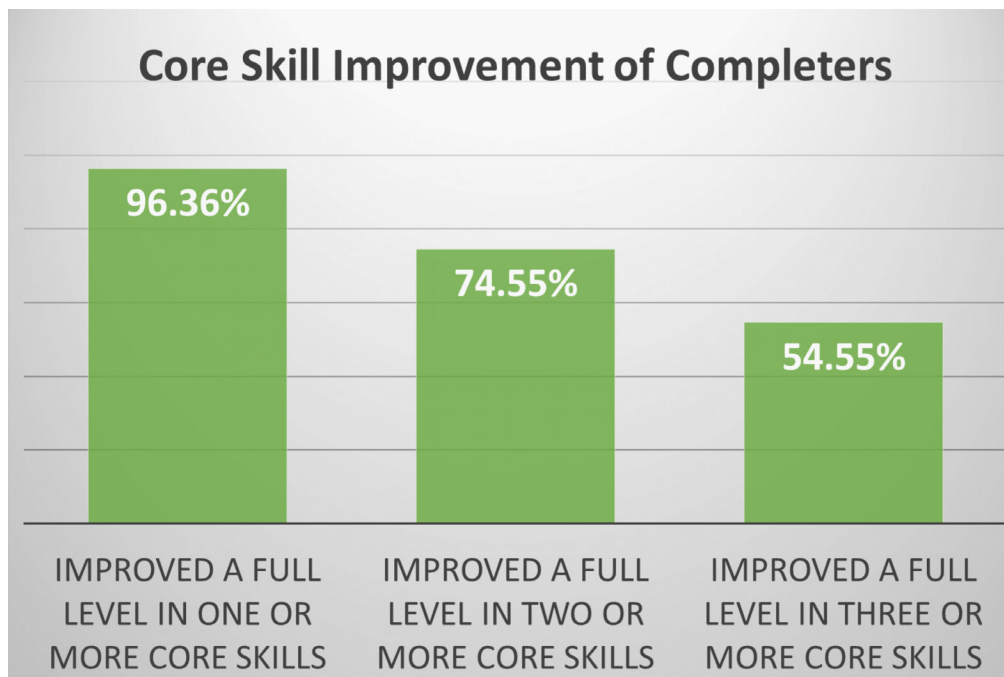
– STUDENT RESPONSE FROM SIGNAL SUCCESS SURVEY

Core Skill Gain

While the Signal Success curriculum covers a comprehensive range of employability and career exploration topics, throughout the curriculum initiative, dependability, communication and collaboration are emphasized as foundational skills for success in career, school and life. These skills overlap and are supported by other skills all of which are also taught and fostered throughout the course, but the four core skills are emphasized as overarching themes for reflection and growth.

All participants demonstrated growth across these four skills and a large majority made sizable gains. In order to measure core skill gain, we looked at instances in which teachers identified gains large enough to move the student to at least the next level on the five point scale, and then only counted the gain if the student also indicated at least a full level of growth.⁷ By this method, 96.5% of completers progressed at least a full level in one or more of the four core skills, and the majority of participants improved a full level or more on multiple skills. Based on teacher assessment alone, the amount of gains made were even larger-- teachers perceived greater skill gains than students themselves. For example, while 54.4% of students improved a full level or more in three or more skills according to the combined assessment of teachers and students, based on just teacher scores, 89.5% of students made large gains in three or all four of the skills.

⁷ In the case of the 7 participants out of the 57 completers who did not return the retrospective post then pre survey, we relied entirely on teacher ratings.



In addition to measuring gains, we also asked student to write and speak about their growth as part of the exit process of the course. Here are just a few examples of what students had to say:

- **“I listen more and ask more deep thinking questions. I am braver when asking questions.”**
- **“I learned to be in control, calm, self-confident, accept responsibility and exchange ideas. I take an “I win, you win attitude.”**
- **“Once I have a direction of what to do, I am able to do the rest of project by myself.”**
- **“I raised my hand more often. Now, I have more initiative.”**
- **“I’m learning to get out of my comfort zone.”**
- **“I listen more to what people need help with.”**

Students participating in this pilot received an average of close to 100 hours of Signal Success curriculum, but summer YouthWorks participants receive just 15 hours as part of their pre-employment training prior to subsidized job placements. In the summer of 2015, local programs conducted condensed versions of the Signal Success assessment with a random sample of 15% of the total number participants (700 participants out of a total of 4,489). Programs only utilized participant surveys and were not able to account for instructor observations of participant skill gains, but based on student self-scoring responses, 60% improved at least a full level on the 5 point scale in at least one of the four core skills. While this rate indicated a more modest set of gains than the 96.5% rate in the pilot program, this is reasonable given the small dosage of curriculum. Also, when examined by each of the four individual skills, most of the students who did not indicate progress started with initially higher skill levels.⁸

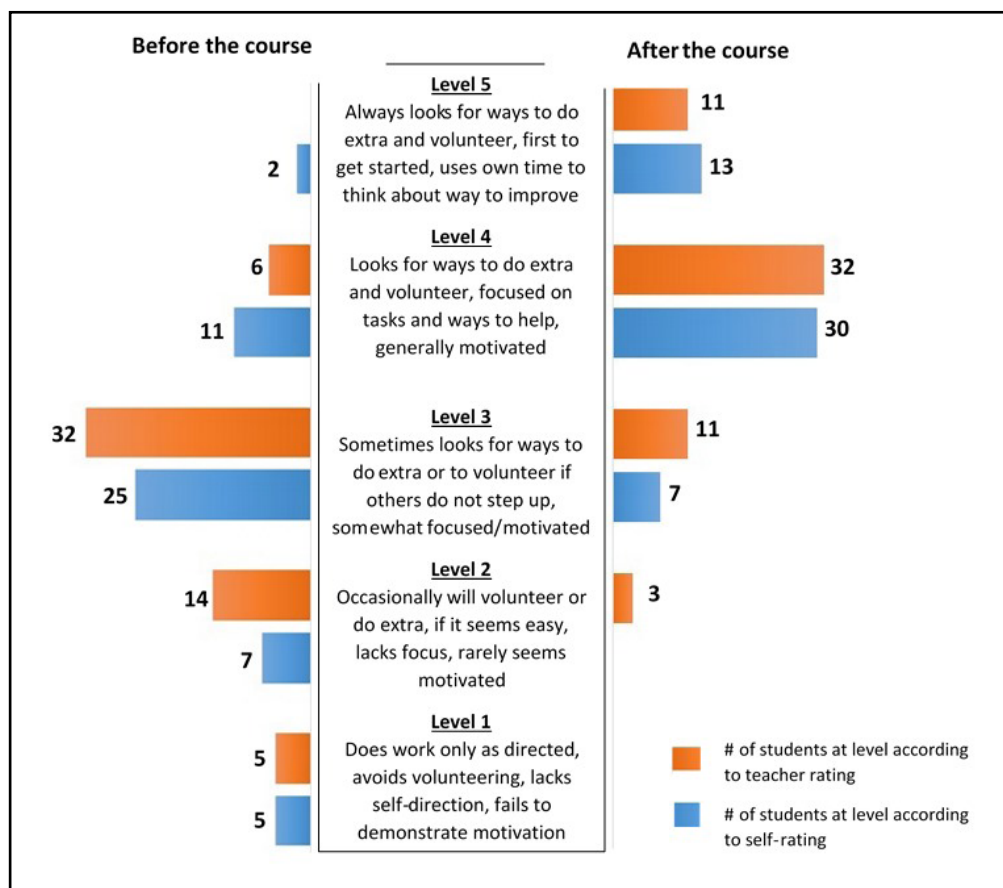
⁸ To see the YouthWorks Summary Assessment of Signal Success program results- http://signalsuccess.org/wp-content/uploads/2016/04/YouthWorks-Assessment-OnePager_rev.FINAL_.pdf

INITIATIVE

Teens and young adults' lack of initiative is a common concern among employers. In fact, initiative rose to the top of employer identified problems in Commonwealth Corporation's 2013 Signaling Success study. Forty-nine percent of employers agreed with the statement that "Teens have less initiative" as compared to other statements like "Teens take longer to train" with which only 9% of employers agreed.⁹ Many employers also raise the specific concern that younger workers are less likely to productively redirect themselves during downtime. While initiative is believed to be linked to motivation, the focus on observable behaviors versus internal measures of motivation made it possible to connect student self-perception and teacher observations.

Of the four skills measured, students scored their initiative lower than the other three skills with a pre-program average of 2.96 as compared to 3.52 for dependability, 3.32 for collaboration, and 2.98 for communication.

STUDENT INITIATIVE LEVELS



While students rated themselves on initiative as described by the rubric above, teachers provided sub-ratings for six different components of initiative. These sub-statements were similar to the rubric used by students, but allowed for greater detail in scoring. Across the six initiative sub-statements on which teachers rated students, gains were equivalent to at least a full level on the 5 point scale; teachers observed the largest gains in students' abilities to use their own effort and knowledge before asking for help and students' ability to show that they are motivated to succeed with average gains of 1.22 and

⁹ Paul Harrington and Nancy Snyder, "Signaling Success: Boosting Teen Employment Prospects," Commonwealth Corporation and Drexel University's Center for Labor Markets and Policy, 2013, page 19.

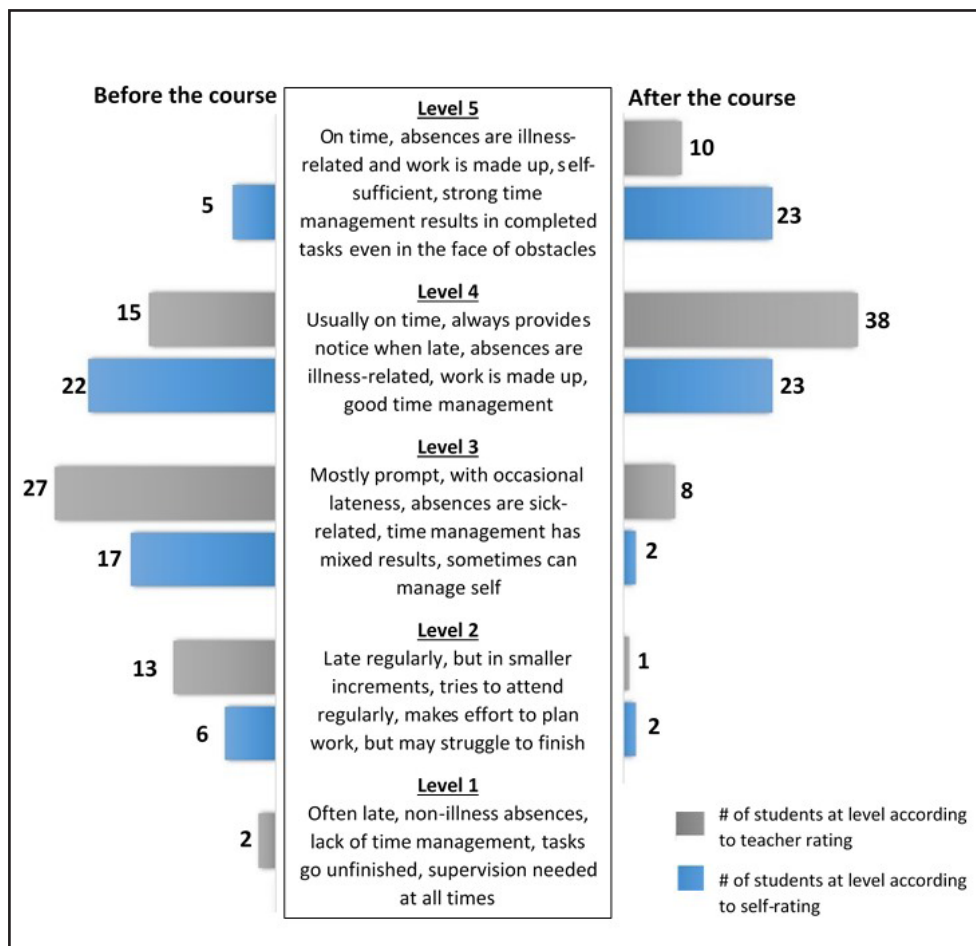
1.19 respectively. Both of these components of initiative are integral to maintaining employment and earning opportunities for advancement.

DEPENDABILITY

In research with employers, lack of dependability is one of the issues most often cited as a deterrent to hiring teens and young adults. Interestingly, dependability was also the skill where there was the largest difference between youth self-perception and teacher-based assessment. Across all four core skills, both pre and post ratings, students tended to rate themselves slightly higher than teacher ratings, with a median difference of 0.36 on a 5-point scale. However, in the case of the pre scores for dependability there was a larger difference of 0.60 with students giving themselves an average score of 3.52 and teachers marking them at 2.92.

This difference in perception may reflect variances in understandings of what constitutes dependable behavior even within specific behaviors such as attendance, promptness, and work completion. The differences for the post scores on dependability narrowed somewhat to a difference of 0.41 with the student self-rating average at 4.34 and the teacher rating average at 3.93. Notably, students made the greatest progress in their ability to “follow through on actions, next steps, and goals without supervision” with an average growth of 1.23, which means in the eyes of their teachers this went from something most students were able to do rarely or sometimes to a skill most students were usually able to display.

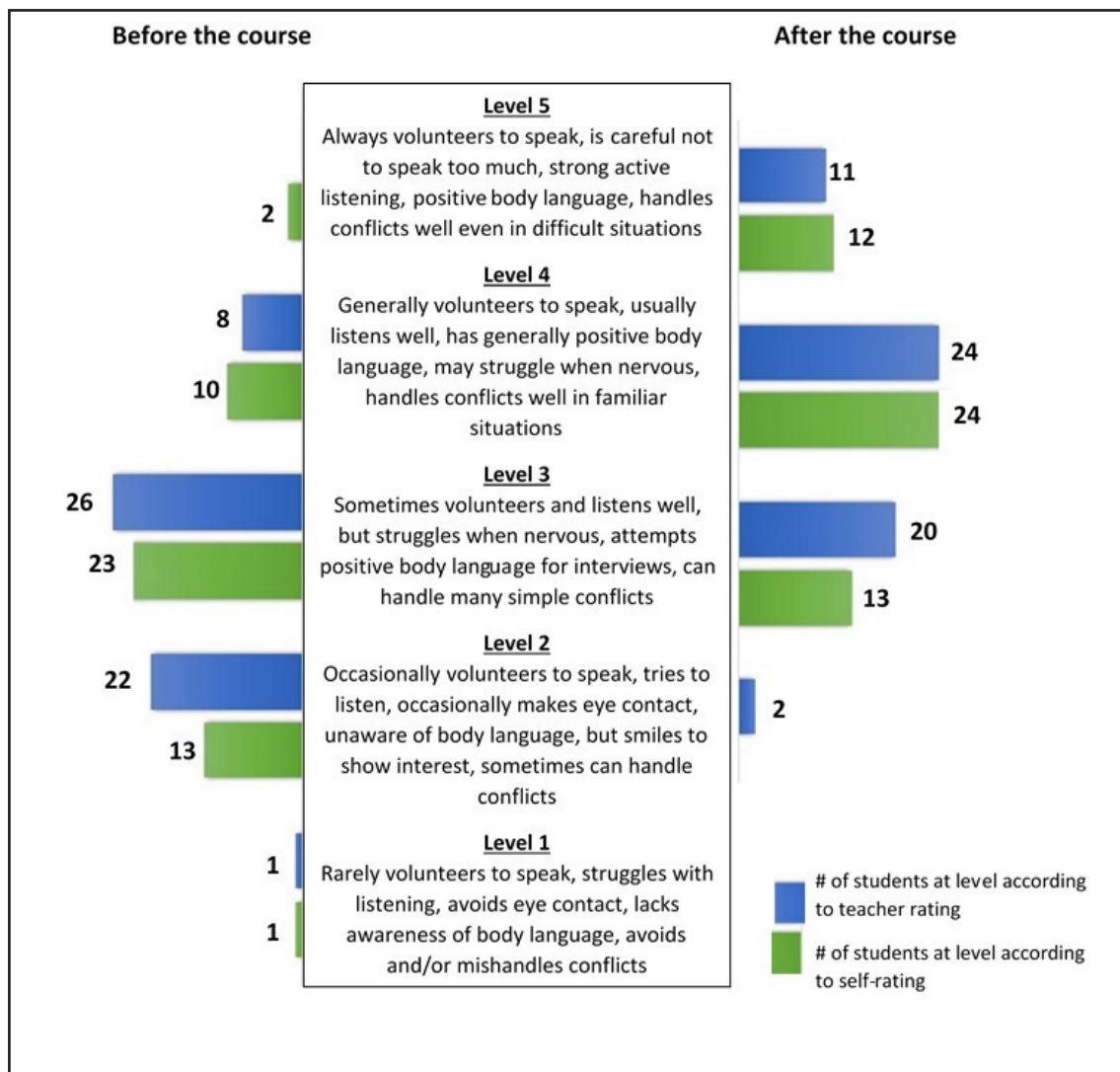
STUDENT DEPENDABILITY LEVELS



COMMUNICATION

Based on the more specific teacher assessment tool that included sub-statements, the areas that students needed the most development in included volunteering to speak and ask questions and handling high stakes communication like conflicts and self-advocacy. These abilities rely not only on strong communication skills, but also other non-cognitive strengths. Students' willingness to volunteer to speak or ask questions is likely affected by their own motivation which is also mediated by interest, understanding of importance, and notions of self-efficacy. Similarly the ability to handle high stakes communication requires an ability to recognize emotions in others and oneself, monitor emotions and affect, and effectively recognize opportunities for empathy. Many of these skills were a part of the curriculum used in this pilot study. While students on average improved 1.37 in these sub areas, all of these topics have been recognized by teachers and program staff as areas where students need even more practice and support. The upcoming revision of Signal Success includes a significant increase in coverage of these topics which support skill gain in the larger focus area of communication.

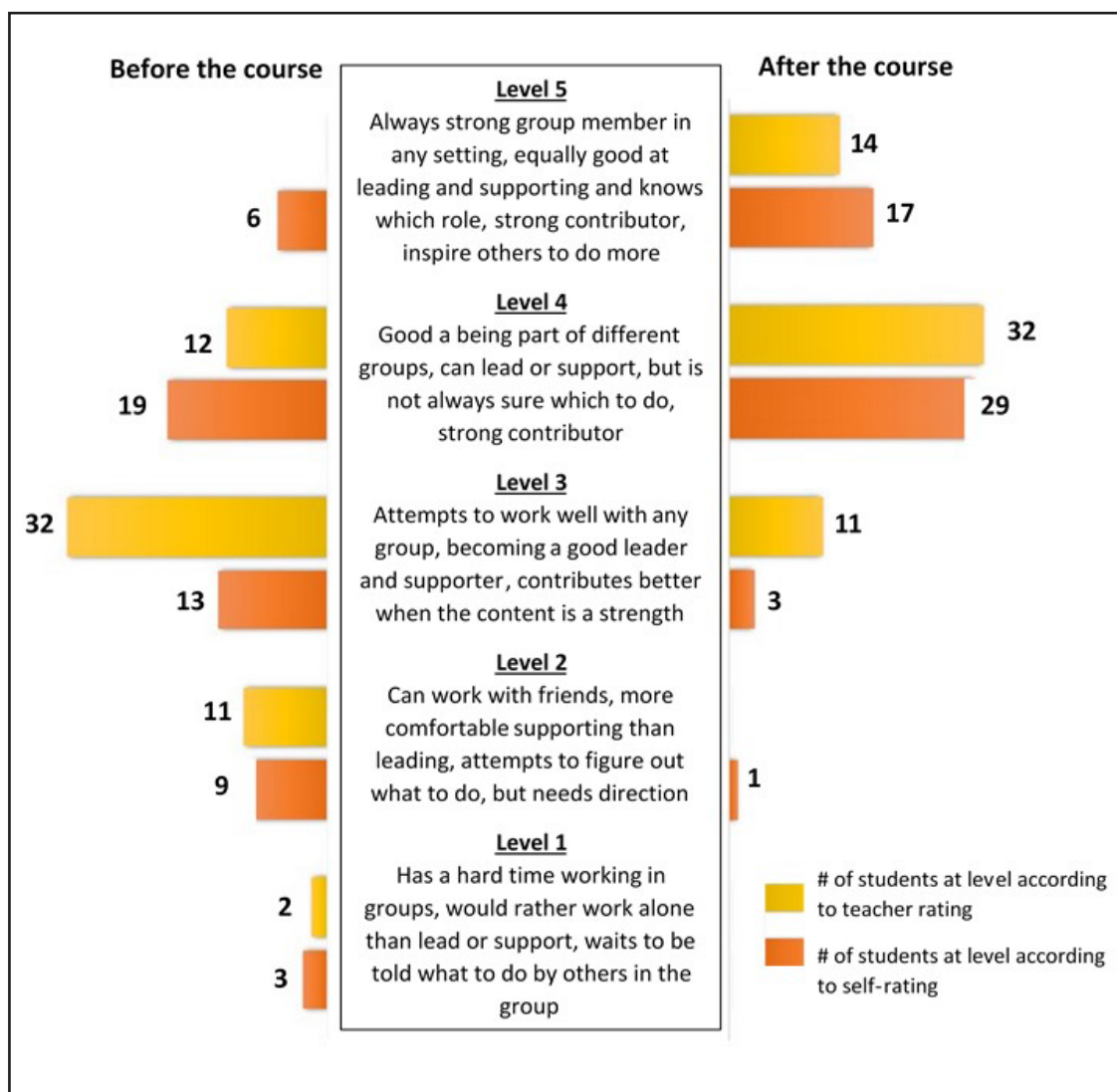
STUDENT COMMUNICATION LEVELS



COLLABORATION

Of the four core skills, collaboration was the only skill where according to teacher assessments a single sub-statement clearly accounted for a larger part of student difficulty with the skill as a whole. In all of the other skills, the sub statements are either somewhat clustered in score or they represent a range. Within collaboration, teachers rated three out of the four sub-statement fairly strong with “demonstrates ability and willingness to take a leadership role” being the notably lower standout. In the post surveys, teachers noted strong changes in students’ leadership skills. The pre-course average for this sub statement of 2.20 out of 5 indicated that most students were rarely able or willing to lead; by the end of course the average rose to 3.43, which means the majority of students were sometimes or often willing and able to lead. Similar to the progression in this one area of collaboration, many students were able to progress in their overall skill level thanks to newfound leadership skills.

STUDENT COLLABORATION LEVELS





“

Once I have a direction of what to do, I am able to do the rest of the project by myself.”

—STUDENT RESPONSE FROM SIGNAL SUCCESS SURVEY

During the recruitment phase, all three of the pilot sites articulated a commitment to trying to serve participants who lacked strong connections to other academic and extra-curricular programs. Many teachers and administrators spoke about this as an opportunity to engage youth who were otherwise excluded or disengaged, so it was not surprising that participant leadership skills may have been nascent.

The Signal Success curriculum includes small group activities with opportunities for peer leadership; the capstone unit centers on a student based learning project where participants design, research, and execute their own educational video or workshop on a career readiness topic. During the individual exit interviews several students mentioned the project as their first experience of feeling like a leader.

SKILL GAIN FOR PARTICIPANTS WITH LOWER INITIAL CORE SKILLS

According to a combination of self-assessment and instructional/ program staff evaluation, over 56% of the participants started the program at a level one or two in one or more of the core skills, which represented significant deficiencies in core employability skills.

Students with these deficits were equally represented across all three programs, with each program having at least 50% of their participants fall into this category. The students with initial lower core skills had an average age of 17.52 at the start of the program, which did not differ greatly from the overall cohort who had an average age of 17.57. Male participants made up a somewhat disproportional amount, representing 55% of lower skilled participants, but only 46% of the overall cohort.

These behaviors represented serious barriers to getting and keeping employment, such as:

- Lateness to work and/or failure to attend
- Unwillingness to focus on work, even when at work
- Avoiding extra work or tasks
- Failure to complete work tasks in a timely manner
- Difficulty listening and making eye contact
- Inability to respond calmly to conflict
- Problems working effectively in groups and teams

Despite these initial deficits, students showed large gains of almost two full levels on a 5 point scale in areas where they were initially weak. In the case of dependability, this is the difference between a student who is regularly late to commitments and struggles to finish work and one who is usually on time, calls ahead when there is a problem and finishes most tasks.

Leadership and conflict resolution were two areas in which initially lower skilled students both struggled and made dramatic improvements. In both cases 80% or more of initially lower skilled participants fell into categories of never or rarely being able to exhibit leadership skills or the ability to handle high stakes communication such as conflicts. However, by the end of the course these numbers had dwindled to under 20%. The charts below indicate the growth in the skill areas among this sub-group of students according to pre and post evaluations from teachers.

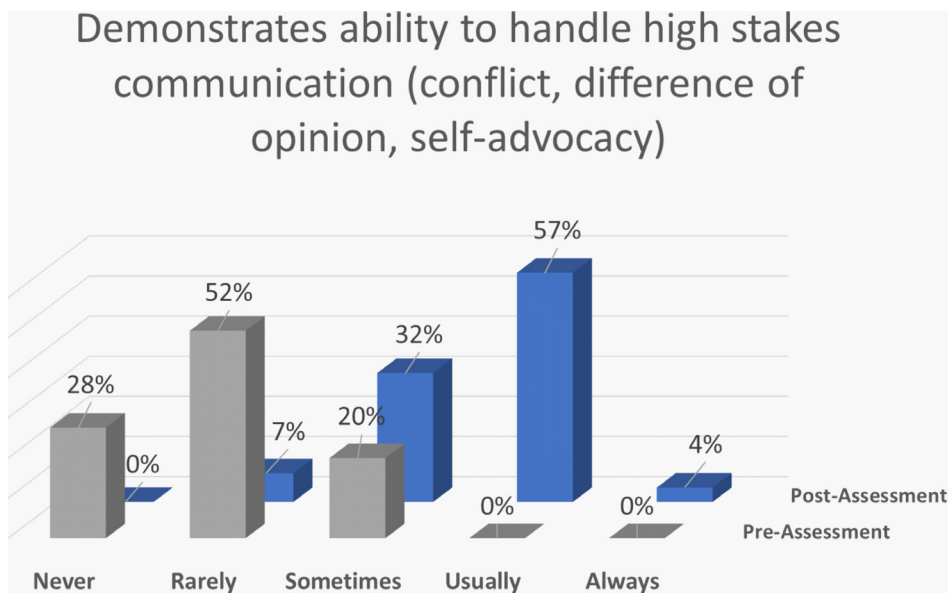


Students experienced an average increase of 1.8 on a 5 point scale in initially weak areas.

TEACHER PRE AND POST RATINGS OF INITIALLY LOWER SKILLED STUDENTS



TEACHER PRE AND POST RATINGS OF INITIALLY LOWER SKILLED STUDENTS



Job Readiness Assets

In addition to helping students build essential non-cognitive skills for employability, the Signal Success curriculum also provides students with instruction geared toward making them stronger job applicants. Students identify and reflect on the skill set and learning style so that they can better assess and adjust to the demands of various workplace tasks and scenarios. Additionally they learn how to develop a professional resume, prepare for interviews, and complete job applications.

Over 85% of participants who completed the program demonstrated the following competencies via portfolios scored with a normed rubric rating scale:

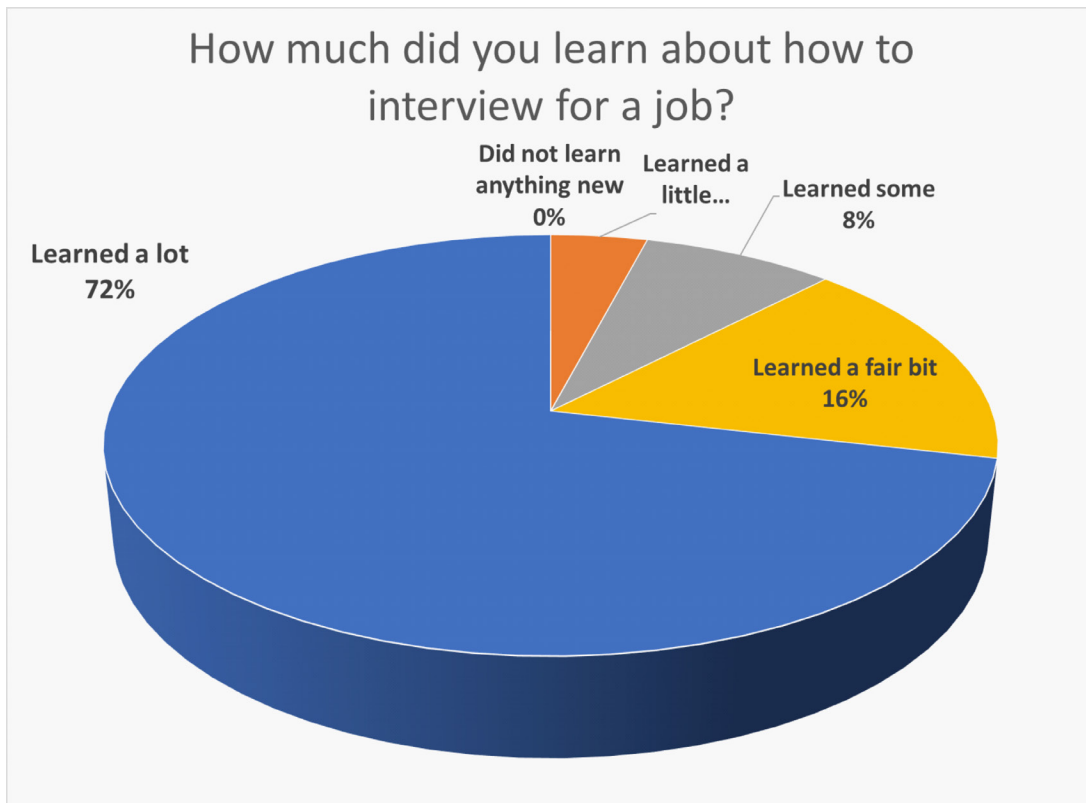


- Identifying and explaining their workplace skills
- Defining and applying elements of professionalism to workplace settings
- Completing professional resumes
- Participating in at least one interview

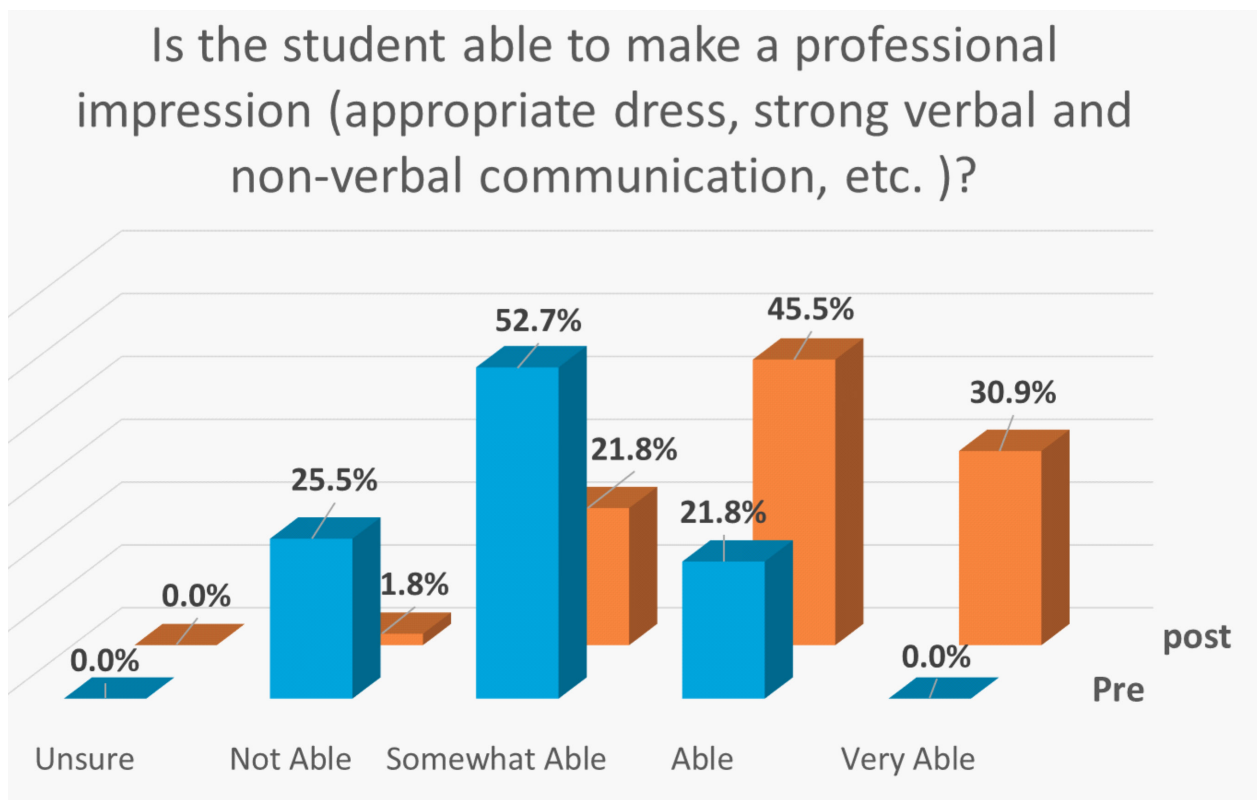
Initially, only 22% of students reported having a strong resume, but by the end that number more than tripled to 73%.

Both student surveys and teacher assessments indicated that participants were better prepared to apply and compete for work opportunities. For example, at the start of the program only 22% of participants reported that the statement, "I have an updated and well-written resume" was completely true, and by the end of the course 73% of students rated the statement as completely true and the remaining 27% identified the statement as at least somewhat or a little true as compared to 40% of students who initially identified the statement as false. 100% of students reported learning something new about how to interview and 96% felt they had learned something about how to act and communicate more professionally. Teachers also observed growth in these areas. At the start of the course instructors identified just over 20% of students as being "able" to make a positive professional impression and were not able to rate any of the students as being "very able". By the end of course more than 76% of students were able or very able to make a professional impression.

STUDENTS SELF-REPORT REGARDING LEARNING ABOUT INTERVIEW



TEACHER RATINGS OF STUDENTS' PROFESSIONALISM





“ I listen more and ask more deep thinking questions. I am braver when asking questions.”

– STUDENT RESPONSE FROM SIGNAL SUCCESS SURVEY

Career Exploration and Awareness

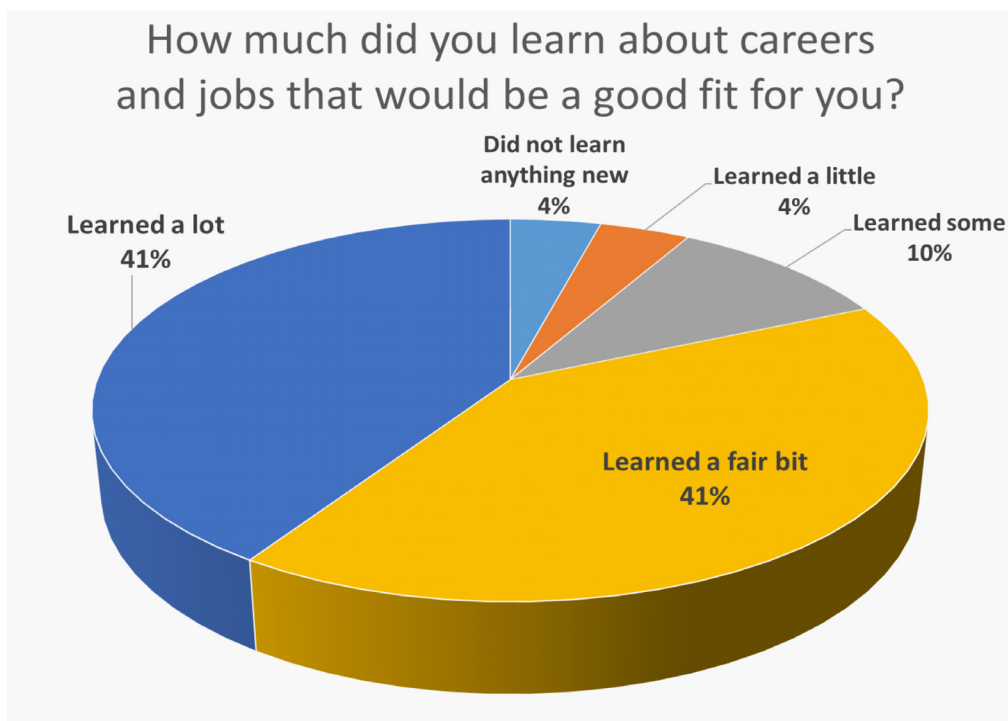
Participants in the Signal Success pilot completed a variety of career exploration activities as part of the curriculum and subsidized work placements. For many students who had not previously engaged in career exploration, examining their skills and interests provided the starting point for more directed exploration. Students benefited from an increased exposure to various kinds of careers as well as the opportunity to develop more concrete career goals and plans.

Over 85% of participants who completed the program demonstrated the following competencies via portfolios scored with a normed rubric rating scale:

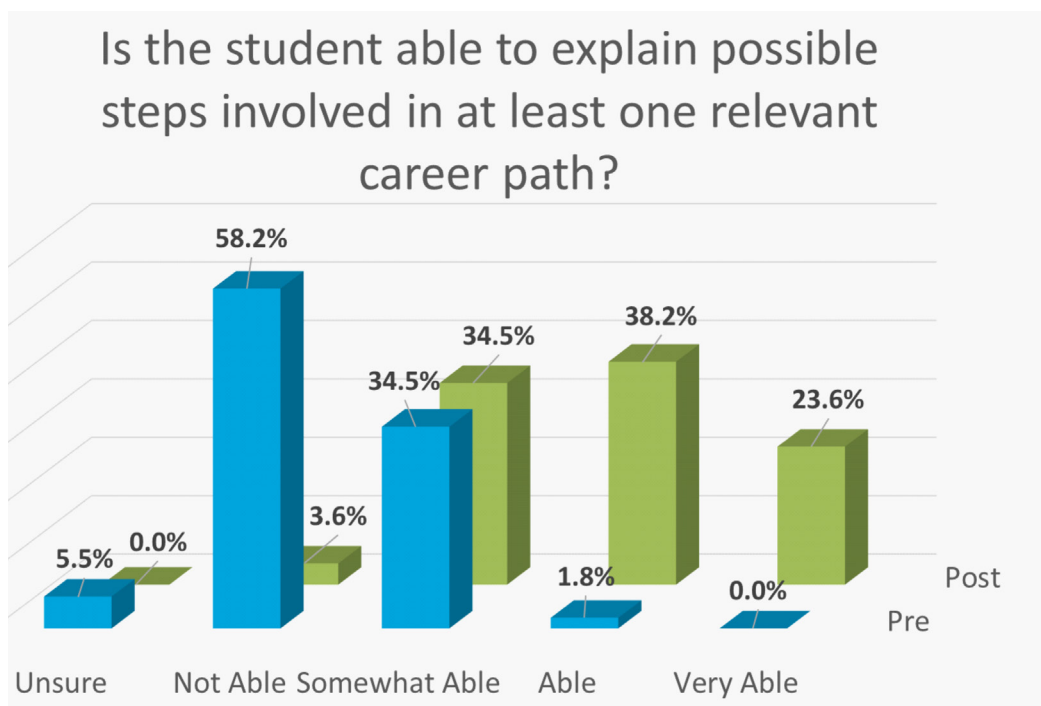
- Articulating possible career interests, factors for job fit and associated actions steps
- Establishing education/ training goals related to career ambitions

A common theme during individual exit interviews was an increased awareness of career goals and necessary training and skills related to goals. Ninety-eight percent of participants reported learning something about their strengths and skills and 96% said they learned new information about which careers and jobs might be a good fit for them. Teachers also reported student gains in these areas. At the start of the courses, teachers noted that over 43% of students were not able to identify and explain their skills. By the end of the course, this number had shrunk to less than 4%. Teachers noted strong gains in students' abilities to identify and elaborate on future careers with over 70% receiving an able or very able rating by the end of the course-- up from just under 4% percent at the start of the course. The ability to explain possible steps involved in a relevant career path was one of the lowest initial areas according to teachers. At the start of the course, less than 2% of students were able to do this and by then end that number had grown to over 60%. Knowledge related to progressing in a career path is particularly important for students to be able to make informed decisions about relevant education, training and work experience options.

STUDENT SELF-REPORT ON LEARNING ABOUT CAREERS



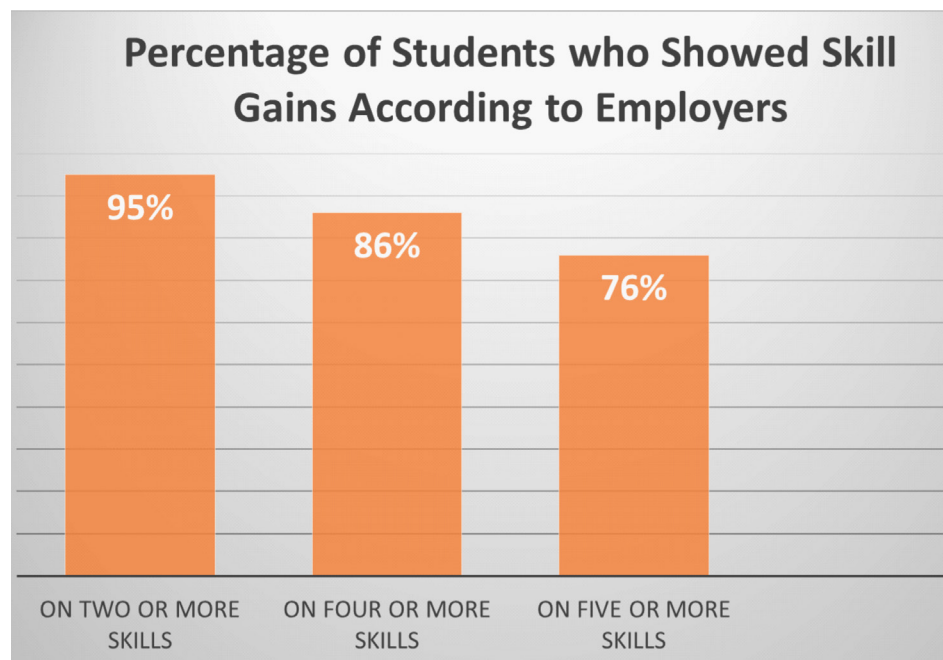
TEACHER PRE AND POST RATINGS OF CAREER PATH KNOWLEDGE



While students clearly made progress using the curriculum, both teacher and student indicators show that there is room for improvement. The revised version of the curriculum includes a more integrated approach to career exploration including greater instances of exposure to careers in lessons focused on non-cognitive/soft skill development. Career exploration units will include more resources for job shadows and informational interviews. Furthermore, opportunities to explore careers through local community partnerships may become a larger part of the implementation plan.

Employability and Job Participation of Program Completers

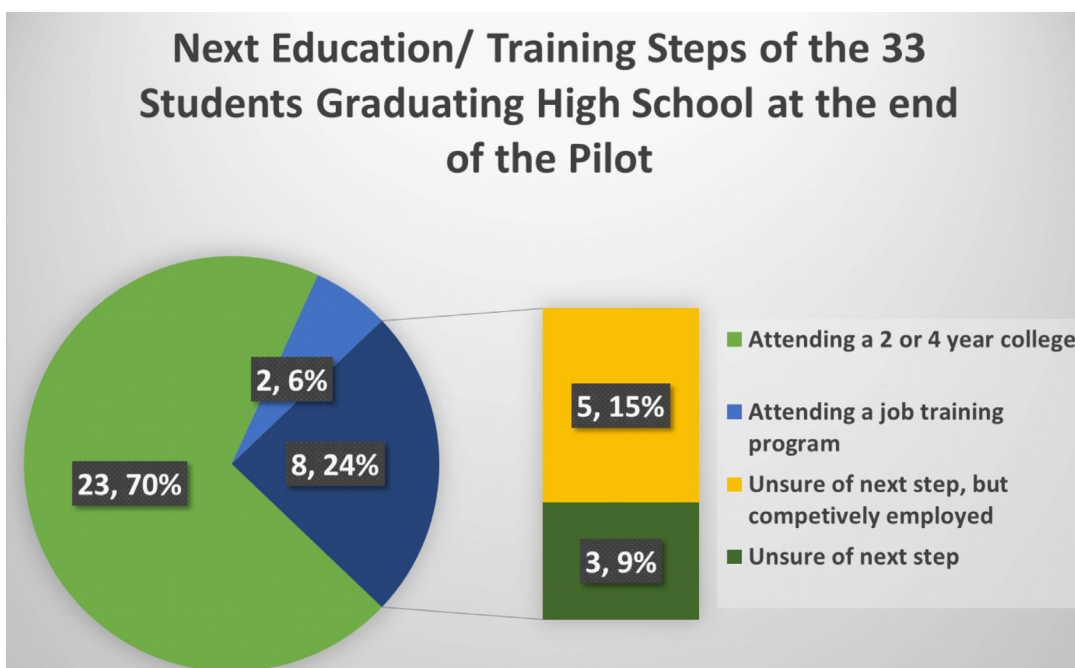
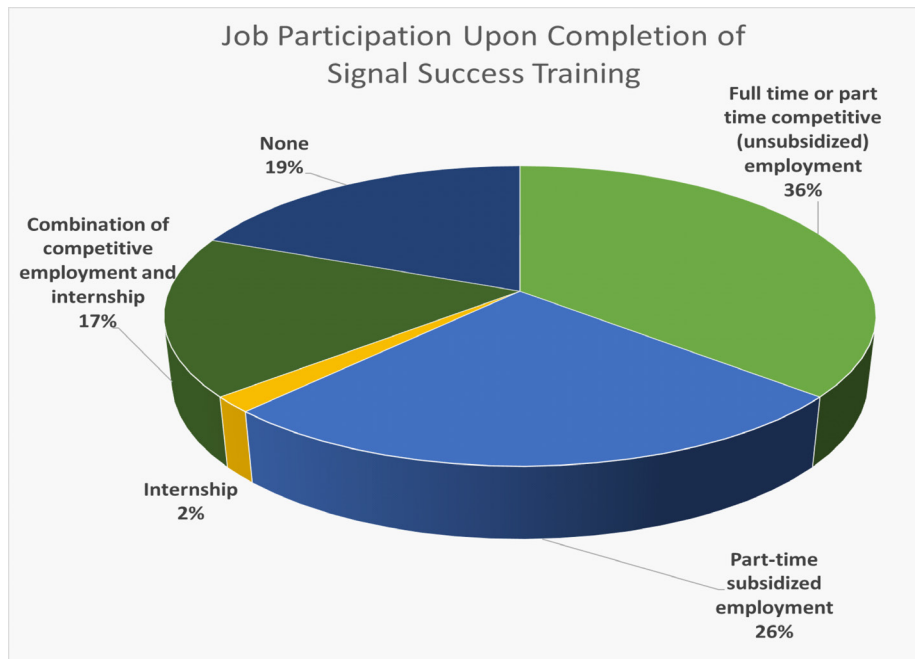
Having students participate in subsidized jobs not only provided opportunities for additional work-based learning, but it also allowed employers to assess student skill development. Employers were asked to complete workplace evaluations for all the participating students. The two school-based programs used the Massachusetts Work Based Learning Plan; Sociedad Latina used its own evaluation which covered many of the same foundational skills in a more simplified format. The average return rate on these evaluations across all three sites was just over 75% but the level of detail offered varied greatly. Of the completed forms, most employers rated students on eight to ten foundational and job specific skills. Based on the completed evaluations, almost all the students made some improvements.



Employers also indicated participant growth on the open-ended feedback components of the surveys. Here is a small sample of what employers had to say about the participants with whom they worked:

- **“She has been able to come into a very hectic environment and impress many of us with her maturity. She is able to clearly communicate with patients and staff and is professional and courteous at all times. She is eager to learn and grow and show initiative.”**
- **“Very hard worker. Always on time and ready to work. I noticed he does more than I expect. Goes the extra mile.”**
- **“A pleasure to work with, follows through on all projects, not afraid to ask questions and gives very good input.”**
- **“He has learned some basic skills in Excel. He also learned the importance of making sure he takes his time on completing tasks and double checking his work”**
- **“She comes in eager to work and asks intelligent questions if she doesn’t understand something or wants to know more.”**
- **“He continues to perform well and complete assigned tasks. He has branched out of his comfort zone to begin contacting potential subjects for our research center.”**

Positive employer feedback is certainly helpful information, but ongoing employment is another key indicator of program success. At the beginning of the program, about 8% of the participants had some form of work. Directly following the completion of the Signal Success trainings, over 80% of the students were employed and/or participating in an internship. Of the three sites, only Malden High School was able to provide a post 6 month employment rate for participants, and as of that reporting, 72% of completing participants had some form of part-time employment. This employment rate is high given that 75% of the participants were still currently attending high school.





“I’m learning to get out of my comfort zone.”

—STUDENT RESPONSE FROM SIGNAL SUCCESS SURVEY

A Closer Look at Students Who Did Not Complete the Program

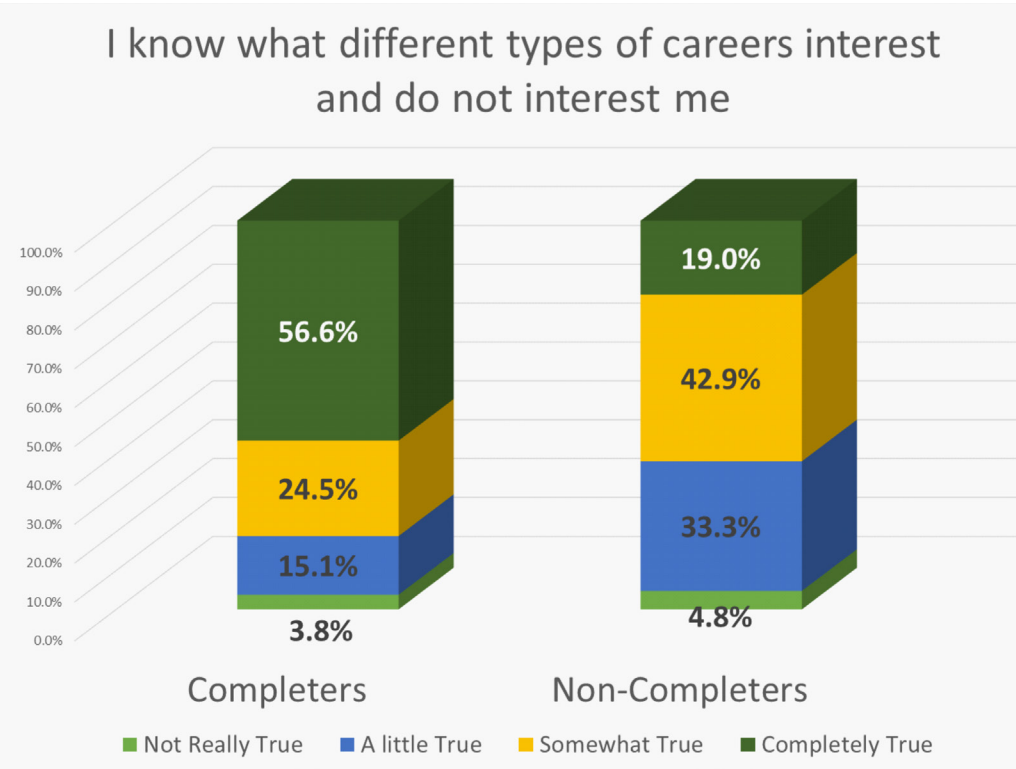
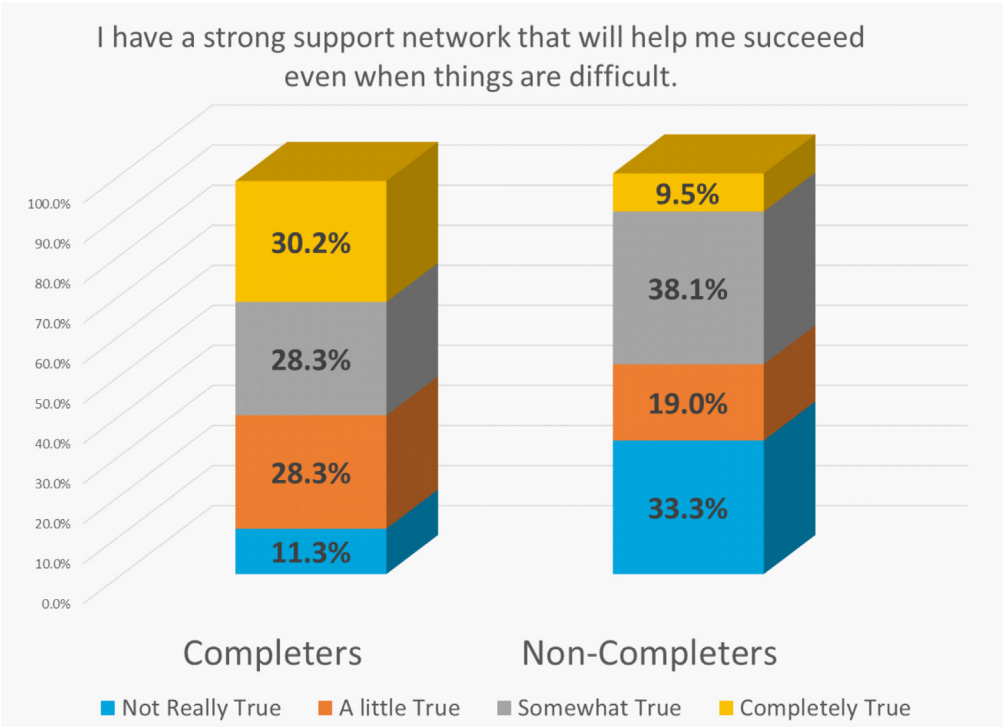
The biggest difference between the three pilot sites was completion rate. Lowell High School, which ran the program as a course during the regular school days, experienced the best completion rate with only 10% of enrolled participants not completing the program. Malden High School’s after school program had 16% of participants not finish the program and Sociedad Latina experienced a 39% non-completion rate. In many cases, multiple factors contributed to a student’s decision to leave the program, but the most common reasons included:

- Need to focus more on school in order to improve grades
- Desire to work a different and/ or higher paying job than the one associated with the program
- Relocation/ transportation issues
- Health/ Childcare issues of young or expectant mothers

The average age of students who did not complete the program was 17.5 which is almost that same as those who did finish. Also, non-completion rates were gender-proportionate with completers. Similarly, there was very little difference in the average pre-assessment scores both in terms of teacher evaluations (-0.2) and self-assessment (-.06).

Across the 25 baseline questions on the self-assessment, there were only two questions that looked different among non-completer versus completers. In the case of career interest and strong support systems, non-completers had a lower average by 0.58 and 0.55 respectively. The difference shows that it may be worth using the baseline survey as a tool to identify participants needing additional mentoring and career counseling services in order to better support program outcomes.

DIFFERENCES BETWEEN RESPONSES OF STUDENTS WHO COMPLETED THE PROGRAM VS. STUDENTS WHO DID NOT





Sample Individual Case Studies



CASE STUDY #1- K

Exit interviews with participants revealed that students could explain not only how their skills improved but also why these gains were valuable to their goals for the future.

K is a senior in high school, who entered the program with no real work experience. English is her second language. Upon entry into the program, she was particularly nervous about working and while she was interested in learning more about various business-related career paths, she also cited “family issues” and “discouragement from people around her” as obstacles to success. Both her initial self-assessment and the assessment completed by her teacher indicated serious skill gaps in initiative, communication and collaboration. K gave herself low ratings on leadership skills, problems-solving and overcoming obstacles and her teachers observed that she was rarely able to persist when tasks were difficult and never willing to assume a leadership role. K improved tremendously in the classroom and at work. She received increasingly strong ratings from her supervisor at the City Clerk’s office, and demonstrated an ability to lead and contribute effectively in small group settings in the classroom. K also clarified her goals and work values. She can now articulate that she values a workplace “where everyone is treated fairly because no one should be treated different based on race, skin color or nationality.” She would like to be entrepreneur that way she can “manage things and make sure everything is done according to what is planned.” Towards the end of the program K got accepted to college in California, and her supervisor agreed to increase her hours during the spring and summer after K expressed a desire to earn more money before going off to school.

CASE STUDY #2- H

H is a senior in high school who performs about average in school and has grade level to above grade level academic skills. He entered the program with a strong ability to present his ideas and opinions, but often struggled to work effectively with others because of a confrontational communication style and an unwillingness to contribute in team settings unless granted the leadership role. During the program, he learned to practice more positive and assertive communication as opposed to defensive and hostile communication. In part due to improved listening skills, he learned to work more effectively as a team member and as a leader. His punctuality and attendance improved during the course and he is handling lateness in a more professional manner, by calling in advance and avoiding being disruptive when entering late. H started the program with clear career interests in design, and has since advanced his understanding of career paths and job requirements for this industry. During career exploration activities he realized that in order to follow a career path in design, he would need to be able to function in team and supportive roles in order to access entry level positions that could then lead to more senior roles.

Key Findings and Next Steps

The 2014- 2015 school year pilot sites provided a valuable opportunity to understand the effectiveness of Signal Success as a comprehensive career-readiness and exploration curriculum for school and community based programs. In addition to gaining an understanding of how the program helped participants develop key skills and increase work readiness and future planning, the pilot also yielded clear information about how to improve both the content of the curriculum and the corresponding implementation models. Below is a list of key findings from this pilot study:

- **Overwhelmingly participants who completed the Signal Success course, achieved gains in the four core skill areas of communication, collaboration, dependability and initiative.** Ninety-six percent improved a full level in at least one skill and 75% improved a full level in two or more core skills. The participants who completed the condensed 15 hour version of the course still experienced gains in the core skills but at a smaller rate. Determining the most effective dosage for various program models is important to maximizing effectiveness.
- **Improvement in communication was related to other non-cognitive skills such as self-efficacy, ability to recognize emotions, self-monitoring and empathy.** Similarly, many students improved their collaboration skills by increasing their ability and willingness to take on a leadership roles-- a skill which is also intertwined with other non-cognitive skills like self-efficacy and motivation. In order to leverage greater improvements the curriculum needs to provide more practice and support with all of these overlapping skills.

- **Initially lower-skilled participants saw the largest gains.** On average, program completers saw a 1.8 improvement on a 5-point scale in core skills with initial deficiencies. These gains represent improvement in areas that would have otherwise diminished employability, such as the ability to arrive on time, complete tasks and communicate about challenges.



- **Students made employability strides by developing job readiness assets such as resumes and interviewing skills.** Nearly all the students reported learning something new about interviewing and how to act and communicate more professionally. Teachers observed these same gains reporting that nearly 98% made progress on their ability to make a professional impression. In the case of Malden HS, which was able to provide a follow-up employment rate, these new skills translated to 72% of completers being employed six months after the program even though more than 75% were still attending high school.

Students who completed the course made strong gains in the four core skill areas (communication, collaboration, initiative, and dependability) and clarified career paths and planning.

- **Future planning and knowledge of career paths were areas of strong growth, with the opportunity for even more impactful development in the future.** Teachers reported that at the start of the course less than 2% of participants were able or very able to articulate the steps involved in a relevant career path, and by the end of the course this number rose to 60%. In order to move students beyond simply identifying possible careers to deeper exploration, it is important to integrate career exploration across more of the lessons.

- **Implementing Signal Success as part of school day instruction yielded a higher completion rate.** And non-completers were very similar to completers with the exception of being less likely on their baseline surveys to report that they knew what career interested them and that they had strong support networks. These results suggest that embedding the course into the school day and using the baseline survey to determine which students might benefit from extra support could improve completion rates. Additionally, some students left the program because they wanted to pursue better employment options, so while subsidized jobs can be a great part of the offering, it is important to encourage and support students who are interested and able to acquire competitive employment.

Many of these lessons learned have been incorporated into the expanded partnership with ten schools in the 2015-2016 year, and others are part of the ongoing plan for improvement. For example, almost all of the 1500 students who are participating in Signal Success coursework as part of school partnerships in 2015-2016 are doing so as part of the regular school day. Some schools continue to offer subsidized work placements through the state youth jobs program YouthWorks, but these are framed as opportunities, not requirements for participation in the course.

Additionally, in order to accommodate the needs of schools and their students, the curriculum has been customized into different dosage size offerings with schools providing anywhere from 35 to 120 hours of Signal Success to their students. Some schools are running multiple program models, allowing students with greater needs to receive a higher dosage. This variety of implementations sets that stage for greater understanding of best practices for the amount of curriculum that different student populations can benefit from.

Finally, the new version of Signal Success for school year 2016-2017 includes changes and additions that reflect findings from this pilot study. For example, the curriculum includes greater coverage of non-cognitive skills that support the four core skills. Expanded topics like self-monitoring, labeling and managing emotions, growth mindset, and empathy are included through a combination of direct exposure and integration with existing subject matter. Additional career exploration opportunities are also embedded more extensively throughout the course.

“

At the beginning of the program, students were unsure of themselves and their place in the workforce; they struggled with communication, initiative and leadership. By the end of the program, students demonstrated marked improvements. Student leaders developed, and employers noted the improvements in initiative and communication. Over 70% of the youth were retained by their employers or hired at other jobs, and two of the students now teach the curriculum.”

-Kelli Collomb, Malden High School

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