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Any opinions expressed are those of the authors.
EXECUTIVE SUMMARY

INTRODUCTION

Teaching entrepreneurship—how to create, grow and run a business or organization—is one potential means to increase college and career readiness skills. Learning how to start a business can improve critical thinking, communication and collaboration (Gallagher, Stepien, & Rosenthal, 1992; Hmelo, 1998), which are key qualities for academic as well as business success. In this study, we examine the implementation of The Network for Teaching Entrepreneurship’s (NFTE) Make Your Job Summer Program, a summer program designed to introduce students to the concepts of entrepreneurship while developing students’ academic and life skills. Specifically, we analyze the impact of this youth entrepreneurship program as it expanded to sites across the country and examine the program design, theoretical underpinnings, implementation, adaptations and challenges.

Developed in the spring and rolled-out in the summer of 2014 as a result of Citi Foundation’s “Pathways to Progress Initiative,” NFTE organized the Make Your Job Summer Program at 18 sites in 10 cities across the country where they have local offices. Make Your Job Summer Program is designed to provide youth with a real-world learning experience in which students develop a business idea and present a business plan for a chance to win seed capital to build their own business. Through classroom instruction, field trips to local businesses, guest speakers and a business plan competition for seed funding, students develop skills, knowledge and attitudes essential for successful entrepreneurship.

Make Your Job Summer Program condenses the material in NFTE’s year-long high school curriculum into an intensive two-week course. Over the course of these two weeks, from 9-5 pm each day, students learn about businesses and entrepreneurship while simultaneously designing their business plans. At the end of the program, students present their business plans to a panel of judges to compete for seed money. At two of the 18 sites, NFTE also offered an 8-10 week version of the program called Startup Summer. Startup Summer is for students who already participated in NFTE during the school year and takes the program a step further by helping them execute their business plans. Students in Startup Summer continue to receive support in launching their businesses into the school year. 378 students participated in the BizCamps and 77 participated in Startup Summer (at the Los Angeles and New York City sites). Although some sites had run NFTE-related summer programs in prior years, other sites were running the summer program for the first time. Two of these BizCamps (Girl Empower BizCamps) served female students exclusively.

Our research examines both the impact and implementation of the program and considers:

- the types of students who enrolled in the program and why;
- how the students experienced the program;
- the perceived match between program design and student backgrounds and abilities;
• how staff understood the goals and expectations of the program;
• the capacities and resources that supported implementation;
• the challenges experienced in delivering the program; and
• how the program was adapted across sites.

RESEARCH METHODS

The researchers used both qualitative and quantitative approaches to understand the program. To shed light on factors that affected program implementation, we conducted interviews with BizCamp facilitators and NFTE program staff at all programs. We documented program implementation more deeply in a sample of five program sites. At these sites, we conducted structured observations of lessons and activities as well as focus groups with a sample of students. The focus groups gathered information about students’ experiences in and views of the value of the various elements of the program, the business plans they developed, program climate and their interactions with program staff and peers. The observations measured the nature and quality of participants’ relationships with their peers and with other adults in the program, participants’ engagement and opportunities for leadership and collaboration, and the overall environment of the program. We also examined changes in student responses to surveys pre- and post-program. These surveys were designed to measure student “entrepreneurial mindset” and knowledge related to entrepreneurship, as well as overall perceptions of the program. These student surveys provide an important perspective on the quality of the program.

KEY FINDINGS

IMPACT

Results from student surveys at the end of the BizCamp program suggest that respondents valued their experience at the BizCamps. The vast majority of students reported that they would recommend the program to a friend, and over three-quarters of students indicated that they would be excited to participate in other NFTE activities. Almost all students indicated that the program engaged them in critical thinking: over 90 percent of students reported that it was “totally,” “mostly,” or “somewhat” true that the program got them “thinking about concepts we learned,” and that it allowed them to “test or try out my ideas.” Just over 80 percent of students indicated that the program was challenging.

Most students felt that instructors supported their learning: almost all students indicated that it was somewhat, mostly or totally true that instructors questioned students to assess whether they are following along, and that the instructors made learning enjoyable. In regards to time management in the program, most students reported that the program didn’t waste time, although approximately forty percent of students indicated that it was at least somewhat true
that they get bored, suggesting that there are some elements of the program that do not hold students engagement.

The Entrepreneurial Mindset Index (EMI), a NFTE-designed survey used during the school year program, asked students about their perceptions of the program’s impact. An overwhelming majority of students indicated that the skills they learned during BizCamp would help them in the future. Approximately 95 percent of students agreed or strongly agreed that the skills they learned at the program would help them in their life and in business. Another 90 percent of students indicated that the skills they learned and experiences in the program would help them in school. When asked to compare their program experience to a normal classroom course, just under 90 percent of students agreed or strongly agreed that they would remember what they learned in program better than they would have in a normal classroom.

On both the pre- and post- EMI assessment, students were asked to indicate whether they would like to own a business. Not surprisingly, prior to the program, almost all students (91.1%) indicated they would like to own a business. This percentage declined to approximately 85 percent after program participation, a small but significant decrease from the pre-test (p<.001). At the same time, more students indicated that they were likely to start a business in the next year, increasing from 25 percent before the program to 38 percent after the program (p<.001). Students were also slightly more likely to report that they were likely to start a business ever (p<.001). So although students were less likely to indicate interest in owning their own business after participation in the program, it appears that those who were interested in starting a business felt more prepared to act in the near future.

When asked about the barriers they saw to starting a business in the next year, students were most likely to report on both the pre- and post-EMI that they didn’t have enough money and were too young. However, comparing responses from pre to post suggest that perceptions of these barriers changed over time. Although still most frequently cited, at the end of BizCamp students were less likely to indicate that youth and lack of money were a barrier than they were prior to the program (p<.001). After the program students were also less likely than on the pre-EMI to indicate that lack of business ideas or skills was a barrier to starting a business (p<.001). Instead, compared to the pre-assessment, students were more likely post-program to indicate that they were too busy to start a business (p<.001). Thus, on average by the end of the program the students perceived their lack of skills, ideas or resources as less of a problem while they became more cognizant of the time involved.

Analysis of the EMI results suggests that students’ mean ratings of communication and problem-solving increased, whereas no change was detected in risk-taking and opportunity recognition. The lack of change in these constructs may be due to the fact that these characteristics are less concrete than the skills and knowledge related to communication and problem-solving. They may be more difficult to influence, more difficult to measure, or were not of particular emphasis during the BizCamp.

In addition to constructs related to an entrepreneurial mindset, students were also asked to rate their level of confidence in specific skills or abilities, including interviewing for a job, managing
personal finances and competing in a business. Students’ mean confidence ratings increased very slightly from the pre- to post-test (p<.05) suggesting that students felt slightly more confident in their professional or workplace skills and abilities by the end of BizCamp. Students also ranked a series of options regarding their future orientation and locus of control. A comparison of mean rank for each category between the pre- and post-EMI suggests that students ranked the role of chance in determining their future lower (indicating that it is less important), on average (p<.05).

Results from the content assessment suggest no change, on average, in student learning on the knowledge measured. This may reflect the lack of incentive students faced in completing the assessments, the difficulty in measuring specific concepts in a short survey, or the challenge of requiring students to acquire an extensive amount of new content over such a short period of time. Moreover, three sites did not administer this assessment and the response rates for other sites were quite low, making it difficult to know whether respondents were representative of the BizCamp population as a whole.

Finally, in focus groups students were overwhelmingly positive in their assessment of the program, and reported valuing their experience at the programs, in particular their interactions with volunteers and guest speakers as well as the individualized support from staff. Students reported feeling challenged and engaged by the program, that they learned a great deal about starting a business, and that these skills would support them in school and in future careers. Although students reported they were more prepared to start a business, they were not more likely to be interested in starting one. Furthermore, many students worried about the competing time demands of starting a business and going to school. It may be that participation in the program served to clarify student career goals and interests.

In interviews staff reported that students learned a great deal about starting a business, and that these skills would support them in school and in future careers. They also reported that students’ communication and problem-solving skills and confidence had improved, as had their knowledge of the importance of determination, persistence and flexibility. Moreover, they felt that the program and curriculum could be adapted to meet the needs of students with varied academic backgrounds.

At the Startup Summer sites, while survey data for students is not available, observations of classroom activities along with interviews and focus groups of staff and students consistently point to a rigorous and significant experience for participants. Observers of Startup Summer program sites reported well-structured activities that incorporated student perspectives and required students to collaborate constructively with their peers. Startup Summer facilitators were able to harness students’ pre-existing knowledge and motivation about business to collectively move business plans forward. Observers witnessed many examples of students teaching and supporting each other, providing insightful feedback to each other, and collaboratively building businesses. Students reported the duration and cognitive demand of the Startup Summer program fostered a spirit of camaraderie among their peers.
Focus groups of students at the *Startup Summer* sites also revealed their motivation, knowledge and skill-level to be very high. Overall these students reported participating in the program in order to develop an idea and turn it into a business, learn how business works in general, or gain more skills and tools with which to run an existing business. In this summer-long program students found their mentors from the business world to be an extremely important resource. Mentors met with students weekly and depending on their relationship, emailed or texted regularly. In some cases students experienced a lack of match between their interests and their mentor’s backgrounds and recognized a lost opportunity. A few staff and students suggested identifying mentors from a broader array of industries and selecting for reliability and consistency to ensure that mentors could provide reliable and consistent support to students throughout the program.

**PROGRAM IMPLEMENTATION: CLIMATE AND LEARNING ACTIVITIES**

Observers of *BizCamp* program activities reported they were well structured and organized, although student engagement often tapered off during independent work when students who had completed tasks were waiting for their peers to finish. Program culture and environment fostered positive relationships between staff and youth and youth and their peers. The business plan competition at the end of the program was a significant motivator for students, and program staff felt it was a key component to the program, serving to challenge students to meet high expectations and empower them in the future. The field trips, guest speakers and volunteers from local businesses were also key components to the program, serving to engage students and provide them with a unique exposure to opportunities in the world of business.

**STUDENTS**

*BizCamp* and *Startup Summer* sites mainly served students from low-income families, the majority of whom were black, Hispanic and Asian and from a variety of neighborhoods across their cities. Student recruitment was a significant challenge across all sites, mainly due to the short planning period, and many sites had fewer students than they had originally planned for.

**STAFFING**

Most sites were adequately staffed with experienced facilitators, but in a few cases the ratio of staff to students was too low to allow for sufficient individualized support for students while developing their business plans. This lack of support was in part due to underutilization of teaching assistants or in some cases other staff in the room who were occupied with administrative tasks. Staff facilitating or supporting the *BizCamps* brought considerable experience and backgrounds related to both business and instruction. All facilitators and local NFTE staff had experience in either business or education and most of the instructional staff were seasoned teachers with several years of experience teaching subjects related to business or the NFTE curriculum itself. Facilitators felt that this experience was essential for effective implementation of the program. In some cases where deep content knowledge was needed, a few sites used mentors and volunteers to provide the missing expertise.
TRAINING AND RESOURCES

To implement the program, facilitators utilized NFTE’s BizCamp agenda and prepared power-point templates to develop lesson plans. Overall, most staff reported that they felt prepared to implement the program curriculum, and attributed this in part to the turn-key nature of NFTE materials and activities. Many facilitators reported relying on their past experience teaching the NFTE curriculum during the school year. The facilitators who did not have prior knowledge of the program curriculum reported feeling less-prepared to run the program. Most felt the guidebook was too dense to navigate, although they did access it occasionally. Key resources supporting implementation included timely access to NFTE resources and strong working relationships with program partners including universities, schools and city youth agencies.

Lack of time posed considerable challenges to implementation. First, staff felt they had inadequate time to prepare for and plan for the BizCamps. As a result, many staff reported having to make last minute adaptations in response to contingencies that would have been foreseeable with additional planning time. Second, facilitators and program staff consistently reported that the pressure to complete student business plans in a short amount of time did not allow for sufficient time to ensure student comprehension of the content. Many felt that the program was output driven at the expense of deeper comprehension. Finally, staff at different sites had different aspirations for the program itself. While facilitators may have covered all topics, their choices about the content to emphasize and areas to skim were not consistent across sites. These differing approaches reflected different understandings about program goals and priorities.

CONCLUSION

Our results suggest that student experiences in the NFTE BizCamp and Startup Summer programs were beneficial and that the implementation of the programs promoted core NFTE principals. In focus groups and surveys, students were overwhelmingly positive in their assessment of the program, and reported being deeply engaged in developing skills related to entrepreneurship. In the post-program Entrepreneurial Mindset Index, a strong majority of students reported that the program engaged them in critical thinking, that instructors supported their learning, and that the skills they learned during BizCamp would help them in school and in life.

Results from the post-program EMI suggest that students’ mean ratings of communication and problem-solving increased. This mirrors reports from staff and students that students’ communication and problem-solving skills had improved. Staff also reported increases in students’ confidence in their own ability to accomplish their goals and an increased awareness of the importance of determination, persistence and flexibility in meeting those goals. Other constructs on the post-program EMI did not change. This finding is perhaps not surprising given that communication and problem-solving were practiced consistently throughout the two weeks, while less time was spent on other skills. Results from content assessments also suggest no
change, on average, in student learning, though analysis of this survey was hampered by low response rates and implementation challenges.

Program staff reported that students learned more about starting and running a business and that these concepts and skills would support them in school and in future careers. Although more students reported they were prepared to start a business by the end of the program, most were not more likely to be interested in starting one. It may be that participation in the program served to clarify student career goals and interests. Furthermore, many students worried about the competing time demands of starting a business and going to school.

Findings from observations, interviews, focus groups, and surveys indicate that NFTE BizCamps were for the most part implemented successfully and as designed. Nonetheless, NFTE should consider improvements to the program particularly related to: increasing efficiencies in planning and staffing the program sites; in refining guidance regarding the overall goals and outcomes of the program; and negotiating the trade-offs between completion of the business plans and deeper content knowledge. Using the program sites as an opportunity to test new ideas or adaptations and providing a channel for feedback to NFTE’s national office, along with following participants’ longer-term outcomes, may provide a few avenues to refine and further develop the program.
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INTRODUCTION

Teaching entrepreneurship—how to create, grow and run a business or organization—is one potential means to increase college and career readiness skills and long-term financial well-being. In this study, we examine the implementation of a summer program designed to introduce students to the concepts of entrepreneurship while developing students’ academic and life skills. Specifically, we analyze the impact of this youth entrepreneurship program as it expanded to sites across the country and examine the program design, theoretical underpinnings, implementation, adaptations and challenges.

Developed in the spring and rolled-out in the summer of 2014 as a result of Citi Foundation’s “Pathways to Progress Initiative,” NFTE organized the Make Your Job Summer Program at 18 sites in 10 cities across the country where they have local offices. Make Your Job Summer Program is designed to provide youth with a real-world learning experience in which students develop a business idea and present a business plan for a chance to win seed capital to build their own business. Through classroom instruction, field trips to local businesses, guest speakers and a business plan competition for seed-funding, students develop skills, knowledge and attitudes essential for successful entrepreneurship.

Make Your Job Summer Program condenses the material in NFTE’s year-long high school curriculum into an intensive two-week course. Over the course of these two weeks, from 9-5 pm each day, students learn about businesses and entrepreneurship while simultaneously designing their business plans. At the end of the program, students present their business plans to a panel of judges to compete for seed money. At two of the 18 sites, NFTE also offered an 8-10 week version of the program called Startup Summer. Startup Summer is for students who already participated in NFTE during the school year and takes the program a step further by helping them execute their business plans. Students in Startup Summer continue to receive support in launching their businesses into the school year. 378 students participated in the BizCamps and 77 participated in Startup Summer (at the Los Angeles and New York City sites). Although some sites had run NFTE-related summer programs in prior years, other sites were running the summer program for the first time. Two of these BizCamps (Girl Empower BizCamps) served female students exclusively.

Our research examines both the impact and implementation of the program and specifically considers:

- the characteristics of students who enrolled in the program and why;
- how the students experienced the program;
- the perceived match between program design and student backgrounds and abilities;
- how staff understood the goals and expectations of the program;
- the capacities and resources that supported implementation;
- the challenges experienced in delivering the program; and
- how the program was adapted across sites.
NFTE BizCamp is designed to provide high school students with two weeks of instruction on how to start and operate a business. Students typically spend two full weeks, from 9-5 pm each day, learning about businesses and entrepreneurship while simultaneously designing their business plans, and at the end of program, students present their business plans to a panel of judges to compete for seed money. A guidebook provides program facilitators with guidance on how to implement the program, and includes a sample program agenda, suggested experiential learning activities, power-point slides for presentations, references to textbooks for more information, and templates for student business plans and presentations as well as rubrics to guide the process. Topics are divided into four units, including opportunity recognition, marketing and sales forecasting, market research and business financial information and operations. Typically students learn about each topic through an experiential activity and/or lecture and then apply the new knowledge to their own business plans. Program activities also include field trips to local businesses, a selling event where students buy wholesale goods and sell them for a profit, guest speakers who provide insight into the entrepreneurship process, and one-on-one coaching sessions with volunteer business coaches to finalize business plans presentations.

NFTE also offered a more extensive version of the program, Startup Summer, at two of the 18 sites. Startup Summer is an 8-10 week program for students who already participated in NFTE programs during the school year. Startup Summer takes the BizCamp program a step further by helping students launch their business ideas through executing their business plans. Each Startup Summer student received an investment grant, a stipend, and the opportunity to work with dedicated business coaches, in addition to relevant tools and resources. After a two week "Ignition" at the beginning of the summer, in which students set individual goals, created marketing materials, and other initial steps, students met twice a week for the next 5-6 weeks. Participants presented on their progress at the end of the summer, and continued to meet with NFTE staff and volunteer business coaches during the school year.
Structured observations of program activities were conducted at four BizCamp sites and one Startup Summer site. Student surveys were analyzed only for BizCamp students.

**LITERATURE REVIEW**

**ECONOMIC BENEFITS OF ENTREPRENEURSHIP**

Entrepreneurship can provide individuals with a means for economic advancement. This is particularly true for disadvantaged groups that face barriers to entering the formal labor market, including youth. Over the past three decades, jobs that typically employ youth have decreased as federal funding for summer jobs programs. Unemployment is higher than average for black, Hispanic and Asian youth and those living in poverty (Morisi, 2010). Black, Latino and other disadvantaged groups also lag behind in terms of business ownership, business earnings and management positions in the financial sector – all key sources of wealth creation (US Census, 2007). Thus, programs that teach youth how to start and run businesses may be an alternative means of providing students with the skills and experience necessary for long-term labor market success. The development of an entrepreneurial mindset may also hold promise for improving student outcomes in school, either by improving skills that are applicable to both work and school or by changing student perceptions of the consequence of school for future success.

**TEACHING ENTREPRENEURSHIP**

Research on programs to teach entrepreneurship and their impact on success in school and in the labor market is limited and lacks consensus.
training for adults suggests that some but not all entrepreneurship training can be effective. Some studies have found positive impacts on self-employment, unemployment and wages (e.g., Benus, 1994). Other studies have found positive impacts on the likelihood of starting and maintaining a business but not on wages (Michaelides & Benus, 2012). And other studies have found positive impacts on business knowledge and retention of clients but not starting a business or business revenue (Karlan & Validivia, 2011). Similarly, research on the impact of youth programs is mixed. A few studies have found positive impacts of youth entrepreneurship programs on the likelihood of starting a business (Charney, Libecap & Center 2000) or on intentions to do so (Athayde, 2009; Souitaris et al., 2007). Other studies have found no impacts on characteristics and skills related to entrepreneurship, and further that participants appear less motivated to create their own business (e.g., Oosterbeek, van Praag & Ijsselstein, 2010).

The mixed impacts of entrepreneurship education suggest that design and focus of the program is likely a crucial element—and it may be that the specific facets of entrepreneurship that a program addresses are likely important. NFTE BizCamp and Summer Startup focus particularly on teaching youth skills and knowledge related to the entrepreneurial mindset. In addition to topics related to starting and running a business, the program is designed to teach students skills related to critical thinking and problem solving, opportunity recognition, comfort with risk, flexibility, orientation towards failure, communication and collaboration, locus of control and self-efficacy. Research confirming the causal relationships between these skills and competencies and entrepreneurial success is limited so far. Nonetheless, there is some suggestive evidence from longitudinal studies following youth to adulthood that early orientation towards achievement and innovation (Dyer et al., 2008; Geldhof et al, 2014), strong social skills (Schoon & Duckworth, 2012), and self-regulation (Geldhof et al. 2014) are important predictors of successfully starting and running a business. Situational and contextual factors, such as access to information, resources, entrepreneurial role models and diverse networks also appear to be important predictors of the decision to start a new business (Geldhof et al, 201; Schoon & Duckworth, 2012; Obschonka, Silbereisen, and Schmitt-Rodermund, 2011). Although no studies have linked increases in measures of these types of skills to entrepreneurial success, there is some evidence to suggest that these attitudes and non-cognitive skills can be taught through entrepreneurship programs (see Souitaris et al., 2007). Thus, although not a clear causal link, these correlational studies provide some theoretical support for the elements of NFTE’s program and the likely impact on entrepreneurship.

IMPACTS ON ACADEMIC OUTCOMES

In addition to preparing students for entrepreneurship, BizCamp aims to improve student academic skills and persistence in school as well as in the labor market. Research pointing to the positive impacts of summer work experience programs on short-term academic outcomes (Leos-Urbel, 2014; Walker & Viella-Velez, 1992) suggests that summer programs that focus on career and technical education, such as BizCamp have the potential to improve student academic outcomes. Research on school-year work experience programs in high school indicate that a focus on career-oriented education and work experience training is an effective means to improve student academic outcomes (Hughes, Bailey, Mechur, 2001). Although these
results are for school-year programs, they suggest that work-experience programs hold promise for impacting student achievement and employment. Supporting this is a body of research that suggests that summer learning programs are an effective means to improve student academic outcomes, including programs for high school students (e.g. McClanahan, Sipe, & Smith, 2004; Settor, Mamun, & Schirm 2009). And summer programs such as NFTE may be particularly important given the relatively limited options high school youth, particularly youth living in urban areas, are offered during the summer (Jacob & Lefgren, 2003)

PEDAGOGY: EXPERIENTIAL LEARNING

Experiential, real-world and project-based learning is a key element of the pedagogical design of BizCamps, in which students learn by doing. Students learn the basic skills required for starting a business by creating practical business plans for their own business ideas. Students also participate in a series of experiential or problem-based learning activities throughout their time in the program, including the wholesale selling event, games to teach negotiation, sales, pricing and marketing. Experiential learning offers several advantages for student learning. First, the focus on a project that is meaningful for the student increases student engagement and motivation (Boaler, 1999)—this feature may be particularly important for a summer learning program when the draw of leisure is strong. Research on the use of this type of learning experience when properly implemented—student-directed, teacher-facilitated, focused on concrete-problems and held over an extended period of time—suggests that it is an effective method to improve student learning. Students using a project-based learning approach tend to learn more than their peers experiencing more conventional instruction (Geier et al., 2008; Wirkala & Kuhn, 2011; Walker & Leary, 2009). A study of work-based learning programs for high school students concluded they improved social and emotional development and helped students integrate a variety of cognitive and non-cognitive skills to perform tasks better (Bailey, et al., 2004). Experiential learning also has been shown to improve critical thinking, communication and collaboration (Gallagher, Stepien, & Rosenthal, 1992; Hmelo, 1998), which are key qualities for success as entrepreneurs as well as students.

RESEARCH DESIGN

The goal of this study is to assess the effectiveness of the BizCamp program and to develop an understanding of its implementation. The following questions guide our research:

1) Change: Do student entrepreneurial knowledge and mindsets and future aspirations and plans change over the course of the program?

   a) To what extent do student knowledge, mindset and aspirations, as measured by student survey responses, change from the beginning to end of participation in the program?
b) What effects do students describe through interviews? To what extent do these self-reports differ from survey findings? How do program staff describe the effect of the program on students?

c) How do students experience the program? Which elements of the program do they value most and why?

2) Implementation: To what extent do staff implement the program as designed by NFTE? How does implementation vary across program sites?

a) Is the BizCamp program adequately specified and clearly understood? Do program materials and training make clear the core elements of BizCamp? Do program facilitators have a clear understanding of the program design?

b) What capacities and resources do staff identify as essential to effectively implement the program? How do staff at NFTE offices support the program?

c) What are the challenges program facilitators face in delivering the curriculum and other elements of the BizCamp program?

d) What adaptations do facilitators make to the program or curriculum and why?

e) Did program implementation and adaptation in the Startup Summer sites differ significantly from the BizCamp sites?

f) Who are the students enrolled in the program? How were they selected? Do they have sufficient background knowledge to complete the business plan? Did student background and experiences vary between the Startup Summer sites and the BizCamp sites?

DATA ANALYSIS

STUDENT SURVEYS

To measure change in students’ knowledge, skills and attitudes over time, NFTE surveyed students at all sites at the beginning and end of the program. Two surveys were administered online using the Survey Gizmo platform. The first survey - the content assessment survey - was designed to measure student comprehension of key business-related content and skills aligned to the core topics of the program: opportunity recognition and business structure, market research, financial information and operations and marketing and sales. The pre-assessment consisted of 16 multiple-choice questions. The post-assessment included the same 16 questions plus an additional eleven questions that are usually included in the school year assessment. The addition of these 11 questions will allow for comparisons between the summer and school year. In order to measure change over time, we focus on comparing student scores on only the 16 questions in the pre- and post-assessments.
NFTE staff also administered a second survey to students - the Entrepreneurial Mindset Index (EMI) - designed to measure students’ knowledge, confidence, values, behavior and attitudes related to problem-solving, comfort with risk, orientation towards the future, communication, collaboration, opportunity recognition, self-efficacy and initiative, and flexibility and adaptability. NFTE research staff compiled the assessment using individual question items primarily from pre-existing surveys, although NFTE identified the sets of items that represented their hypothesized entrepreneurial mindset constructs. The post-entrepreneurial-mindset assessment also included questions about perceptions of the program implementation and value.

Together with the qualitative data, the surveys provide a detailed and nuanced picture of how youth perceive the program and inform the design of future measures of program impact. We conducted a pre/post-test comparison of surveys of students’ entrepreneurial knowledge and mindsets and estimated mean changes in student knowledge and attitudes from before to after the intervention. Details of how the surveys were administered, collected as well as survey response rates across sites are described in Appendix A, “Methods of Data Collection,” at the end of this report.

**QUALITATIVE STUDY SAMPLE**

In order to document program implementation and explore the factors that helped or hindered implementation we selected a sample of six program sites at which to conduct in-depth research on implementation: New York City (Girls Empowerment and Startup Summer), suburban New York/Westchester, Chicago, Newark and Los Angeles (Startup Summer). In collaboration with NFTE staff, we have selected sites to ensure diversity in geography and program features likely important for successful implementation. Specifically, our sample includes sites from the East Coast, Mid-West and West Coast, large and small cities and suburban areas, newly- and long-established sites, and a mix of programs, including the regular BizCamp, Startup Summer sites and Girls Empowerment BizCamps. We also include sites that differ in the number of weeks of participation and number of participants.¹

In addition to in-depth site visits at these six program locations, we conducted phone interviews with BizCamp facilitators and NFTE staff across all BizCamp sites to obtain a broader perspective of program implementation and challenges. Details describing how interviews, focus groups, and observations were conducted can be found in Appendix A, “Methods of Data Collection,” at the end of this report. The observation protocol used to observe activities during site visits can be found in Appendix B.

We analyzed all qualitative data (interview and focus group data) using the qualitative data analysis program, *Atlas.ti*, to code data and identify cross-cutting themes across data sources. We also compared results across sites in order to capture variation in implementation.

¹ Due to inclement weather and airline cancellations we had to alter our fieldwork plans at one site. Therefore, we conducted interviews with staff and students via webcam, and did not conduct observations at this site.
FINDINGS

The first part of the Findings section uses data collected during interviews and focus groups with staff and students to describe how students experienced the program. The second part analyzes changes in student knowledge and attitudes as captured in pre- and post-program surveys.

STUDENT PERCEPTIONS OF IMPACT

In order to develop a deeper understanding of the potential impact of BizCamps, we asked students to describe what they had learned in the program and their plans for the future. We asked particularly about impacts on academic and non-academic skills and knowledge, attitudes, values, confidence and future aspirations, including whether students were more or less likely to want to start their own business following participation in the program.

When asked about what they had learned in the program, students in the focus groups reported that they had better knowledge and skills needed to both start and run a business. Students spoke about learning how to conduct market research, market and brand products, manage expenses and business financial statements, determine pricing, calculate risk, and developing a deeper understanding of the process, such as start-up costs and specific steps to take. Additionally, almost all students remarked on the significant effort and time required to start and run a business.

In addition to providing essential support when running a business, many students indicated that learning these business-related skills and knowledge would help them in other parts of their lives. For example, a few students indicated that they would use their knowledge about business financial planning to inform how they managed their personal finances. Students at a few sites also stated that because of their knowledge about pricing and marketing, they were better consumers, more careful about how they spent money and were paying more attention to advertising mechanisms.

In addition to learning about business-specific concepts, students reported that the content and skills they learned during the program was related to broader academic skills and content. A number of students reported that they had improved their math skills, particularly through working on and making and correcting mistakes on business financial statements and a few also reported that their writing and research skills had improved as they worked to clarify their messaging to customers. Furthermore, students indicated that they would apply the content they learned in the program to specific classes. For example, students reported that the program prepared them for their high school math or economics class.

I will say academically [the program] helped with everything, your research skills, math, writing, because you have so much writing that you need to do. Also, coming with this, you need to do a lot of work with the variable expenses. So it definitely boosts your academic skills. So I’m pretty sure when we go back to school we’re probably ahead of the average students just from being here.
Students also became more aware of the math skills required to run a successful business, and one student reported that she would enroll in more advanced math classes than she had planned to prior to participating in the program.

Students spoke about learning more general “soft” skills and attitudes, many of which were related to those within the entrepreneurial mindset framework. Communication skills seemed particularly salient. Students we spoke with reported that they had improved their communication skills as a result of the program. Students stated that they had learned how to make better oral presentations, and they were more confident in their public speaking and presentation skills. At most sites, students also noted that they learned networking skills, as well as the importance of networking for future success. Related to these communication skills, students at most camps reported that they had learned interpersonal skills that would be important when interacting with customers or co-workers. Many students spoke about learning how to cooperate, compromise and work on a team in the program.

Students connected these communication skills to learning more broadly about how to conduct themselves professionally in the workplace. For example, one Startup Summer student described the connection between learning communication skills and the workplace:

[the program] really prepares you for the future because it teaches you how to conduct yourself in the workplace. It actually matures you on…the way you talk… That’s it, it just matures you. Become a young adult.

In addition to developing their communication skills, most students spoke about learning the importance of determination, persistence, being open to failure, and flexibility. Students often spoke about the important role of both persistence and passion, particularly given their perceptions of the difficulty in starting a business.

Like it doesn’t matter what your background is or whatever. …it’s really persistence. Like one founder said that they worked a lot even though they quit their job and everything and still ended up successful and they would eventually graduate from college. It really teaches you, you need to adapt no matter what the situation.

Many students also reported that they were learning the importance of responding productively to feedback about their ideas. A few students also reported that they were learning to be creative and “think outside the box,” think critically and use evidence. A few also indicated they had learned time management and organization skills.

As with the business content knowledge and skills, most students also indicated that the softer skills that they had learned in the program would support their success in school as well as out of school. For example, one student described implications for her increased confidence and comfort in public speaking.

[I]t applies to any other subjects because whatever we do in this program, the marketing, the advertising, it also helps with my English class. Any time we write an essay or anything or a research project we always have to present it even when we say poems and I used to get scared, be the first one to put up my hand.
Now I feel like I can be able to do that. Like I can be the first one to say my poem or my paper.

Another student described learning to be adaptable and flexible, and how these skills would be important both professionally and in school.

That’s the greatest thing about having this camp, is that they teach you about you can’t expect everything and you have to be able to be flexible. When something comes up, you have to learn how to circle around it or how to address it. This could come in school, maybe in an interview for a job, etcetera. So even though the main focus is business here, they teach you the skills to be overall just a good performer in general.

When asked about the likelihood of starting a business, student responses were mixed. Some students indicated they were more likely to start a business because of what they had learned and experienced in the program – that they were more motivated, excited, better prepared with a clearer understanding of what it takes to open a business.

Because of what I learned here. It just made a spark go off. So many ideas, all of these qualities, I can do it.

On the other hand, some students noted that because they had gained a better understanding of the amount of effort required and of their own career goals and interests, that they were less interested in starting a business. Many of these students were concerned that the time required to start a business would take away from study time in college specifically. A couple of students also indicated that over the course of the program they decided they were not sufficiently comfortable with risk-taking to start a business, while a few others felt that their business plan was not possible to implement alone because of the start-up costs or scope of the work.

I’d rather work for a company versus become an entrepreneur and try to start from the bottom because it takes a lot of hard work and it’s also work that might not pay off and I’m not that big of a risk taker. I wouldn’t do that personally but [the program] taught me to realize that.

In contrast to the mixed responses from BizCamp students, all students interviewed at the Startup Summer sites indicated they were more likely to start a business after attending the program. This may not be surprising given that interest and experience in entrepreneurship is a requirement for entering the program.

In response to questions about whether they were likely to start their own businesses in the future, a few students spoke about how the program had inspired or empowered them to follow their passion in a concrete way.

This is kind of like something you’d want to keep doing no matter what—whether or not other things happened or the problems that come. You try to fight through it rather than give up. I don’t know. I think it just kind of made me put things into perspective that I should really focus on how I’m going to make a difference in the way that I want, rather than do it in a way that everybody kind of wants.

I feel like the most important thing that I’ve learned, just in NFTE overall is that if there is something that you have an idea about, there is a chance for progression
[in starting a business]. They give us the opportunity to build what we want to and we’re not too young to do that, so we can succeed in whatever we put our mind to.

Students did not report that attending the program changed their future educational aspirations—most indicated they were already planning to go to college. Rather, students indicated that they learned more about the potential pathways, such as new ideas about career options and how to obtain financial aid for college. A few students also reported that they were more focused on education, particularly on improving the skills they need to be successful business owners.

Students in three sites also commented on the value of the BizCamp within the context of summer activities. These students indicated that they had limited opportunities to occupy their time productively during the summer, and further that the program provided them with a unique opportunity to learn about entrepreneurship not otherwise available to them. For example, one student reported that he would otherwise “just go to the park and play soccer,” while another student reported that he would otherwise be “work[ing] in McDonalds.” One student added more generally that the BizCamp would “be a great program for cities…with high crime rates. I mean, they always talk about how to get kids off the streets and this is creating a response.” In reply to a question about whether the program met her expectations, one student commented:

It didn’t live up to my expectations in terms of how hard—I thought it was kind of going to be easy but it was really hard work. I never really worked this hard. I didn’t get any sleep either just getting presentations done in time and anything that they told us to do. It was hard, it was a hard summer. This was the hardest summer I ever went through but it was all worth it.

In at least two sites, however, a few students noted that other entrepreneurship programs were available through other local organizations. When asked whether the BizCamp was different from their prior experience, the students who had participated in entrepreneurship programs prior to the program reported that NFTE provided an experience that was more closely connected to starting a business, through the program’s focus on skills and knowledge needed to run a business, such as business financials and marketing, in addition to those needed to create a business (e.g. creating a pitch and financing). One student also noted that the individualized support was unique:

[in a different entrepreneurship program] last year…I got to learn a lot from really good professors and mentors, but it was overall general knowledge and this program, they actually help you with your personal business instead of just giving everybody the same knowledge and information.
STAFF PERCEPTIONS OF IMPACT

KNOWLEDGE TO START A BUSINESS

Staff descriptions of the important content and skills that students learned tended to focus on skills and procedures rather than specific concepts. For example, many staff reported that students learned processes and procedures related to business and economics, such as how to create a business plan, how to pitch a product, project revenue, conduct market research and market a product. Students learned business terminology and vocabulary as well. Staff reported that the combined student knowledge of these processes and vocabulary would provide them with an important frame of reference for starting a business in the future. Some staff members also reported that students learned more general skills that would also be useful in high school or college, including how to conduct research, evaluate sources, and become more adept at using technology, such as power point, online surveys and in the case of one program site, programming skills. Additionally, many reported that students developed a better understanding of the expectations for behavior in a professional work environment, such as how to interact professionally, provide a firm handshake, make eye contact, dress appropriately and speak articulately. A few staff members felt that it was not that students had learned more in the program, but that they had become more comfortable with mathematics, and in some cases, more motivated to learn mathematics. A couple of facilitators also indicated that students had improved their basic math skills, related to reading graphs, using percentages and fractions.

ENTREPRENEURIAL MINDSETS AND LIFE SKILLS

Program staff felt that the program had supported students to develop a number of skills and attitudes related to the NFTE entrepreneurial mindset (although few used this term specifically), including communication and collaboration, initiative, persistence, self-direction, critical thinking and problem-solving. Growth in communication skills was a particularly salient for staff. Almost all staff reported that students improved their presentation and public speaking skills, including, for example, how to project, make eye contact, develop and use power point presentations. A number of staff also remarked that students became more confident and comfortable in presenting. Related to this skill, many staff reported that students had learned how to communicate professionally and were more confident communicating with adults and more willing to reach out, pose questions or ask for assistance.

I’m really passionate about our students, overall, learning how to present and communicate to people who aren’t their peers. So many of them are comfortable talking to one another, but they are completely fearful of talking to adults. NFTE volunteers really want kids to succeed and…they’re really easy to talk to, and so we try to really encourage a lot of squared off shoulders and eye contact and comfort in what you know and being able to articulate it well. I think our kids are very smart, but they have terrible communications skills, and…people don’t see that they’re so clever and enterprising. If we can….make them comfortable and articulate and confident, that takes care of a lot of the problems that they’re going out into in the world to begin with.
Some staff felt that students were also more aware of the importance of networking and how to do so.

Over the course of the last couple of weeks, I’ve seen them, many of them wait around to talk to volunteers afterwards and tell them their business ideas and ask for internships, and I think that’s the best part of it is that they’re kind of figuring out that they can do that without feeling stupid or looking dumb or whatever.

A number of staff indicated that students were better able to articulate their ideas and messages, particularly complicated concepts. Related to communication, many staff members reported that students had improved their teamwork and collaboration skills. Students were better able to collaborate with diverse peers and adults.

it’s because of the size and the diverse array of learners we have and different schools and everything, I’ve really enjoyed kind of seeing those kids kind of come together and forming partnerships together…like even if it’s sometimes they’re disengaged or just like not into like the academic side of things as much, just this experience of coming here every day and being here for a long period of time working with the kids, and I think is one that it’s been fun to watch them as they’ve built those collaboration skills too.

Concepts related to empowerment, confidence and self-direction provided another common thread across many of the staff’s discussions of the ways in which students changed during the program. Many staff members indicated that students gained more confidence in themselves and in their ideas during the process. As one staff member described it, students “find their voice. They recognize what they have of value to share.” Some staff also felt that students felt more empowered through their interactions with outside business mentors, volunteers and guest speakers, who served as role models who provided concrete examples of how a simple idea could be successful and how to persist in the face of multiple failures. Staff felt this relationship was particularly powerful when the business volunteers and guest speakers shared similar backgrounds—such as youth, neighborhood, race/ethnicity, poverty, lack of success in school— with the students.

Our volunteers are really great at saying, ‘This is my fifth business. My first two business, I lost all my money. I lost two years of my life, but I’m still here and I’m still doing this,’ and I think that they need to see that in order to feel like very idea isn’t stupid or even if it’s stupid, who cares. Life is worth figuring out anyway.

Related to this observation, an equal number of staff spoke about impacts related to self-direction and initiative. Staff felt that students had become more self-reliant, better able to work independently, and more empowered to make decisions and act on their future plans. A number of staff attributed this change in part to the feeling of accomplishment and pride that students gained. Completing and presenting their business plans, being pushed by staff to think creatively and independently to develop an idea that they care about inspired and motivated students:
...empowerment, that they can change their own futures, that they are an active participant, and can effect change in their own lives. A lot of them see themselves as passive in their own lives, and so it's teaching that they can really take the reins.

[the business design] has to be feasible, you have to be able to do it tomorrow. Two, it has to represent you, it has to be in line with your values and your passion. And three, it needs to be unique. It has to be different from what's already out there. And so what that means is that no one can create your business for you. You have to do it for yourself. And that was really hard for the girls to understand, that I didn't have the answer. They had to come up with the answers. And so it really fostered self-reliance and it really gave them an opportunity to develop confidence in their own skills.

If you get students that you can invest them in the right way, they walk away with an incredible sense of accomplishment that in two week's time they've completed, you know, a very large amount of work from the PowerPoint presentation to the written business plan and that's a really great experience for students because I think that some students come from backgrounds where they spend, you know, semesters and year long courses not completing as much work as they do in the two weeks. So from a motivation standpoint, from an 'I can actually be successful and accomplish something,' they walk away with that skill as well.

Similarly, a number of staff reported that building a product or creating a business plan activated intrinsic motivation within students. Staff suggested that creating something new and seeing the fruits of their labor helped students see new possibilities and their own potential.

I think for a lot of these kids with their website ... it's just really intimidating. It's like, 'I don't have any idea what that is or how that got there,' so I think that kind of exposure and not only the fact that they can make it, but they can be a part of kind of that creation process, on a macro scale is a really cool one for them and something that I've seen them at least kind of get excited and energized about. Even like something so simple like you're looking up...what their cost would be for web-posting and their domain name. And for a lot of the kids, they didn't know how that's even happened.

Furthermore, a few noted impacts related to flexibility and adaptability–specifically that students were better at both giving and receiving feedback, and that they were more comfortable with failure and more likely to persist. One staff member explained why:

But a lot of them are just really hoping to find something that they're good at.... I think what we're doing right here is giving them an opportunity to fail without feeling crappy about it. And so, that's motivating; to see that you can—failure isn't necessarily the worst thing in the world; that you can dust yourself off and try something else and you are armed with the skills to do that.

Finally, a couple of staff reported that students' critical thinking, reasoning skills and use of evidence improved. Staff indicated that students were better problem solvers and better able to use these skills independently.
FUTURE ASPIRATIONS: COLLEGE AND CAREER PATHWAYS

When asked whether the program changed student aspirations, affirmative and negative responses were relatively evenly divided. About half the staff indicated that the program did not impact their aspirations for their future. Staff attributed this to the fact that planning for the future was not a specific focus of the program, but also because most students entered the program already planning to attend college. On the other hand, an equal number of staff, in response to questions about whether aspirations had changed, indicated that students had more knowledge about possible college and career options, and that this increase in knowledge and exposure served to increase student aspirations. Some staff noted that the BizCamps provided students with unique exposure to the real world of business, rather than the more typical school-based academic experience.

We are exposing them to so many things that they have no clue about and I think that, in and of itself, inculcates a sense of aspirational desire and want.

So these were all things I think really helped them to see that could be them and that they could broaden their horizons and really strive for something that maybe they didn’t even know existed before.

At program sites located at colleges, students learned more about college admissions and financial aid. From guest speakers and business volunteers, students learned about the degrees that business owners earned. With this expanded knowledge, staff felt that students could “see a clearer pathway” to college. Experience in the program also catalyzed students to think about and clarify their career goals. A couple of staff reported that learning that they could turn their passion into a career served to increase student aspirations.

The kids that are here are generally exceptionally bright and creative kids that wouldn’t ever consider themselves exceptionally bright or creative. They are often in the middle to bottom of their crappy schools. And because they don’t necessarily rise to the top, they don’t get seen. And so, they don’t ever leave school thinking that they can do anything really special. A lot of NFTE kids go on to some form of college, two or four years, but we have had a lot of success … in helping our kids to see college as an important stepping stone to their next project.

We also asked staff specifically whether students were more likely to become entrepreneurs after participation in the program. Most staff indicated that students were more likely to open a business after participation in the program because they were more prepared—opening a business became a greater possibility because students have more knowledge about the steps required and developed concrete plans for their business. Some staff also reported that at least some students were also more interested and inspired to start their own businesses as a result of the program. Conversely, a few staff indicated that students were not more likely to start a business after participating in the program, either because, as a few staff postulated, school is more of a priority for students and starting a business would take away from studying, or because students became more aware of the amount of time and commitment required to start a business, and thus less likely to start a business.
RELATIONSHIPS

Although not an explicit piece of the NFTE theory of action, a number of staff spoke about the relationships that students developed during the program. Many staff indicated that an important outcome for students was that they left the program with strong and supportive relationships from a network of like-minded peers:

These students were getting together after camp ended up and going to each other's houses and Skyping with each other...Any time you put someone through the wringer like that, they come out with amazing relationships. Again, this is the networking part of it for them. Not necessarily working with professionals in the business community, although I do think that's part of it, but now working with each other. It's huge. Not just getting friendship, but really someone who's like, "Oh, I might be applying to the college you're applying to," and having that connection.

A few staff, particularly those in the Summer Startup sites where mentors played a larger role, noted students gained access to a network of adults—business volunteers but also NFTE staff—who could serve as resources to students in the future:

I think a lot of them have grown in the sense that they're not scared to ask either mentors or [people] on any fieldtrips that we're going on, about how they can help them ...and they have very specific questions, ...they'll go out and be like, "Okay, well I just launched my Twitter account and I don't have that many followers. Like how do I get more followers?" So it's becoming very tangible and they're asking the right and appropriate questions and getting the right people to help them out.

VARIATION

Staff indicated that impacts on students were not uniform— in other words, most felt students learned something, but, as one program facilitator stated “everyone had a different lesson learned.” For example, students with stronger skills might develop more sophisticated business plans, delve into the details of preparing a plan and think more critically about each element, while students with less academic preparation might improve their oral presentation skills. Some staff attributed this to the individualized learning design and the differentiated instruction that they were able to provide students.

There's some kids that are struggling probably a little bit more to understand some of the concepts. And so, we went pretty straight lined through like how to do the financial model or maybe geared them towards one that was a little simpler than another. And ... I worked with [another student] on a much more kind of sophisticated projection model of how to do the sales. So that core number is the same, what’s your total revenue for the year, but the method of going about it can be as sophisticated as you want.
When asked whether certain types of students benefitted more than others, responses fell into several different categories. A number of staff reported that students who were more motivated learned the most in the program, compared to, for example, those who enrolled in the program at the behest of their parents or teachers.

I think the students who benefited the most from the program were students who were first of all highly motivated students to begin with. I think they’re students who like to achieve and I think they’re students who like to kind of wrap their arms around a challenge and actually see the results and want to be successful and that’s really the kids who rose to the top.

On the other hand, a few staff felt that students who were not top performers in school were mostly likely to benefit from NFTE’s program—that the BizCamps reached students that schools could not, and while academically successful students learned at the program, they would likely have learned in any program they attended. One staff member provided a description of impact on participants who were disengaged in school:

I would say kids who are just disengaged in general, they don’t get why they go to school, they haven’t yet fully developed their personalities, so they’re trying to figure things out. So they might be kind of shy or, they’re just not a lot engaged in the world. So I think that’s where we’re able to make the most impact, because we’re able to harness whatever that intrinsic drive…what their passion is and transform it into something, and that brings them out of their shell and they’re able to shine in ways that they might not have if they just continued on with school and, nothing else happened, you know?

FINDINGS FROM STUDENT SURVEYS

This section provides an overview of findings for two NFTE-administered surveys to assess students’ knowledge, attitudes and skills related to entrepreneurship, and perceptions of the BizCamps. These provide an important perspective on the quality of the program. Research on the use of student surveys suggests that student feedback on surveys can be predictive of learning, and may be more reliable than classroom observations and achievement gains on standardized assessments (Cantrell & Kane, 2013).

ENTREPRENEURIAL MINDSET INDEX (EMI)

Respondent background characteristics

As shown in Table 2, EMI survey respondents come from diverse backgrounds. Just over half of EMI respondents are female, just under two-thirds of students are Black (64%), and just under twenty percent are Hispanic. Most students live in homes where English is spoken while approximately ten percent of students live in Spanish-speaking homes and another six percent
in homes where another language is spoken, including French, Cantonese, Creole, Mandarin, Punjabi and Wolof.

Table 2. Respondent Demographic Characteristics

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>57.1</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>1.1</td>
</tr>
<tr>
<td>Asian</td>
<td>2.8</td>
</tr>
<tr>
<td>Black</td>
<td>63.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>17.2</td>
</tr>
<tr>
<td>White</td>
<td>1.6</td>
</tr>
<tr>
<td>Other</td>
<td>8.3</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>5.0</td>
</tr>
<tr>
<td>Home language</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>82.8</td>
</tr>
<tr>
<td>Spanish</td>
<td>11.1</td>
</tr>
<tr>
<td>Other</td>
<td>6.1</td>
</tr>
<tr>
<td>Grade fall 2014</td>
<td></td>
</tr>
<tr>
<td>8th</td>
<td>0.6</td>
</tr>
<tr>
<td>9th</td>
<td>8.3</td>
</tr>
<tr>
<td>10th</td>
<td>27.8</td>
</tr>
<tr>
<td>11th</td>
<td>32.8</td>
</tr>
<tr>
<td>12th</td>
<td>21.1</td>
</tr>
<tr>
<td>Graduated from high school</td>
<td>9.4</td>
</tr>
</tbody>
</table>

Table 3 displays students’ entrepreneurial and business experience prior to entering the program. Just over one-third of students reported that they have worked in a business before, a number that is not surprising given national youth employment rates during the summer are approximately 34% (Bureau of Labor Statistics, 2014). Close to ten percent of respondents indicated that they have owned a business, and 42% of respondents indicated that they have an immediate family member who owns a business. The percentage of students reporting that an immediately family member owns a business is surprisingly high, given that an estimated 13% of adults run or are in the process of starting their own business in the US (Kelley et al., 2013).

Table 3. Entering Business Experience

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worked in a business before</td>
<td>37.8</td>
</tr>
<tr>
<td>Owned their own business</td>
<td>8.9</td>
</tr>
<tr>
<td>Immediate family member owns a business</td>
<td>42.2</td>
</tr>
</tbody>
</table>

Program Satisfaction

During the post-program assessment, students responded to a series of questions regarding their satisfaction with the program and perceptions of its value. Results suggest that
respondents valued their experience at *BizCamp*. The vast majority of students reported that they would recommend the program to a friend, and over three-quarters of students indicated that they would be excited to participate in other NFTE activities (see Table 4).

**Table 4. Program Satisfaction**

<table>
<thead>
<tr>
<th>Description</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would be excited to participate in another NFTE class or event</td>
<td>77.8</td>
</tr>
<tr>
<td>Would recommend this program to a friend (percent who agree a lot or agree a little)</td>
<td>86.8</td>
</tr>
</tbody>
</table>

The survey also asked students to describe their *BizCamp* experience using a list of 16 descriptors, from which students could select any that applied. Close to three-quarters of respondents indicated that their experience was “interesting” and “useful” (see Figure 1). Another two-thirds indicated that the *BizCamp* was “challenging”, “motivating,” and “fun.” Approximately forty percent of students reported that the program was frustrating, and another twenty percent, that the program was confusing, possibly reflecting the challenging nature of the program. Almost no students (five percent or less) felt that the program was “a waste of time” or “pointless.”

**Figure 1. Participant Descriptions of their BizCamp Experience**
PERCEPTIONS OF IMPLEMENTATION

Students were asked a series of questions regarding their perceptions of program activities related to cognitive demand and critical thinking (see Figure 2). Almost all students indicated that the program engaged them in critical thinking: over 90 percent of students reported that it was “totally,” “mostly,” or “somewhat” true that the program got them “thinking about concepts we learned,” and that it allowed them to “test or try out my ideas.” A slightly smaller percentage of students—just over 80 percent—indicated that the program was challenging, a similar percentage to the two-thirds of students who indicated the program was challenging in the descriptor question above (Figure 2).

Most students felt that instructors supported their learning: almost all students indicated that it was somewhat, mostly or totally true that instructors questioned students to assess whether they are following along, and that the instructors made learning enjoyable. Finally, students responded to a few questions regarding time management. Most students reported that the program didn’t waste time, although approximately forty percent of students indicated that it was at least somewhat true that they get bored, suggesting that there are some elements of the program that do not hold students engagement.

Figure 2. Participant Perceptions of Program Implementation

<table>
<thead>
<tr>
<th>Statement</th>
<th>Totally True</th>
<th>Mostly True</th>
<th>Somewhat True</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, this camp has been challenging for me</td>
<td>21.8</td>
<td>23.8</td>
<td>36.2</td>
</tr>
<tr>
<td>Overall, this camp got me thinking about the concepts we learned</td>
<td>48.3</td>
<td>26.4</td>
<td>17.8</td>
</tr>
<tr>
<td>In this camp, I get to test or try out my ideas to see if they work</td>
<td>40.2</td>
<td>31.8</td>
<td>21.8</td>
</tr>
<tr>
<td>My instructors ask questions to be sure we are following along when they teach</td>
<td>51.2</td>
<td>23.8</td>
<td>17.2</td>
</tr>
<tr>
<td>My instructors make learning enjoyable and fun</td>
<td>36.2</td>
<td>28.4</td>
<td>23.6</td>
</tr>
<tr>
<td>Our camp stays busy and doesn’t waste time</td>
<td>39.7</td>
<td>28.7</td>
<td>22.4</td>
</tr>
<tr>
<td>This camp does not keep my attention—I get bored</td>
<td>9.2</td>
<td>11.5</td>
<td>22.4</td>
</tr>
</tbody>
</table>

Percent of respondents
The entrepreneurial mindset assessment also asked students a series of questions about their perceptions of the program’s impact focusing on what they learned in the program (see Figure 3). An overwhelming majority of students indicated that the skills they learned during BizCamp would help them in the future. Approximately 95 percent of students agreed or strongly agreed that the skills they learned in the program would help them in their life and in business. Another 90 percent of students indicated that the skills they learned and experiences in the program would help them in school. When asked to compare their program experience to a normal classroom course, just under 90 percent of students agreed or strongly agreed that they would remember what they learned in the program better than they would have in a normal classroom.

Figure 3. Participant Perceptions of Program Impact

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree a little</th>
<th>Agree a lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel that I will remember what I have learned in this course much better</td>
<td>41.0</td>
<td>47.2</td>
</tr>
<tr>
<td>than a normal classroom course.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The skills I learned and the experiences I had in this camp will help me</td>
<td>34.3</td>
<td>61.9</td>
</tr>
<tr>
<td>in my life.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The skills I learned and the experiences I had in this camp will help me</td>
<td>23.2</td>
<td>70.7</td>
</tr>
<tr>
<td>in business.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The skills I learned and the experiences I had in this camp will help me</td>
<td>38.7</td>
<td>51.9</td>
</tr>
<tr>
<td>in school.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ENTREPRENEURIAL INTENTIONS

On both the pre- and post-assessment, students were asked to indicate whether they would like to own a business (see Figure 4). Not surprisingly, prior to program, almost all students (91.1%) indicated they would like to own a business. This percentage declined to approximately 85 percent after program participation, a small but significant decrease from the pretest (p<.001).
By the end of the program, significantly more students indicated that they were likely to start a business in the next year (see Figure 5). Approximately two-fifths of students (38%) reported it was likely that they would start a business in the next year, compared to one-quarter (25%) of students at the beginning of BizCamp (p<.001). Students were also slightly more likely to report that they were likely to start a business ever (p<.001). So although students were less likely to indicate interest in owning their own business after participation in the program, it appears that students felt more prepared to act in the near future on their desires to own a business.

When asked to report barriers to starting a business in the next year, students were most likely to indicate on both the pre- and post-EMI that they don’t have enough money and are too young (see Figure 6). However, comparing responses from pre to post suggest that perceptions of
these barriers changed across time, and that by the end of BizCamp, students perceived lack of skills, ideas or resources as less of a problem while they became more cognizant of the time involved. Although still the most frequently cited problems, at the end of BizCamp students were less likely to indicate that youth and lack of money are a barrier than they were at the start of the program (p<.001). On the post-EMI students were also less likely than on the pre-EMI to indicate that lack of business ideas or skills was a barrier to starting a business (p<.001). Instead, compared to the pre-assessment, students were more likely at the end of program to indicate that they were too busy to start a business (p<.001).

**Figure 6. Reasons for not starting a business this year**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Pretest</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don't have enough money</td>
<td>45.1</td>
<td>41.3</td>
</tr>
<tr>
<td>I'm too young</td>
<td>37.5</td>
<td>32.1</td>
</tr>
<tr>
<td>I don't have a good business idea</td>
<td>9.2</td>
<td>23.9</td>
</tr>
<tr>
<td>I don't have the skills</td>
<td>8.7</td>
<td>17.4</td>
</tr>
<tr>
<td>I'm too busy</td>
<td>17.4</td>
<td>26.1</td>
</tr>
<tr>
<td>Other</td>
<td>7.6</td>
<td>8.7</td>
</tr>
<tr>
<td>My family won't let me</td>
<td>2.2</td>
<td>1.6</td>
</tr>
<tr>
<td>I don't want to</td>
<td>2.2</td>
<td>5.4</td>
</tr>
</tbody>
</table>

***p<.001

**CAREER DEVELOPMENT**

In addition to exposing students to entrepreneurship, another goal of BizCamp is to support students in developing clearer plans and goals for the future. Responses to questions about time spent in the past week related to career development suggest that students were more likely to report they spent more time planning their future at the end of BizCamp, compared to the beginning of BizCamp (see Figure 7; p<.001). This finding may mean that participants used their time at BizCamp to think more about their future than they had in the past, but students might also be referring to time outside of BizCamp as well.
Students were also more likely to report they had spoken more frequently to an adult other than an instructor about a business topic during the past week (see Figure 8; p<.001). This increase is perhaps due to the fact that mentors at most program sites worked with students individually during the last week of the program, and provides some suggestion that students interacted more with adults while they participated in the program. The difference may also reflect an increase in conversations with adults outside of BizCamp, such as at home, as students worked intensely to prepare their business plans.

*** p<.001
The EMI also asked students a series of questions designed to measure sets of skills, knowledge, attitudes, and behavior that are hypothesized to be important predictors of entrepreneurial success, comprising the “entrepreneurial mindset inventory”. For most categories, students were asked to rate on a scale of 1 to 4 (1=disagree a lot; 2= disagree a little; 3=agree a little; 4=agree a lot) the extent to which they agreed with statements related to their confidence or comfort in conducting a skill, their own ability or knowledge related to that skill, and/or whether they value the characteristic or ability (see Appendix for a list of questions by construct). For each construct, we create a “naïve” index by calculating students’ mean ratings for each cluster of items. To assess change from the pre-assessment to post-assessment, we compare these mean ratings within each category across the two assessments.

Figure 9 displays the mean ratings for the pre- and post-survey for constructs that are related to skills and knowledge.

**Figure 9. Pre and post-test means: Entrepreneurial mindset skills and knowledge.**

![Pre and post-test means: Entrepreneurial mindset skills and knowledge.](chart)
Results suggest that students experienced growth in their confidence and attitudes towards communication-related and problem-solving skills. Students’ mean rating of attitudes and skills related to both communication and problem-solving increased on the post-EMI, compared to the pre-EMI (p<.01 and p<.05, respectively). In contrast, students’ mean ratings of teamwork and collaboration-related skills and attitudes decreased (p<.05). Furthermore, EMI results suggest no significant differences across time in students’ opportunity recognition or risk-taking attitudes, skills and behavior (p>.05).

Figure 10 displays the mean ratings for constructs that we characterized as more closely connected to character traits or personal characteristics, including flexibility, orientation towards failure, self-efficacy and locus of control and orientation towards the future. Our results suggest no significant difference between the pre- and post-EMI on students’ mean ratings of any of these constructs.

**Figure 10. Pre- and post-test means: Entrepreneurial mindset personal characteristics and traits.**

In addition to constructs related to an entrepreneurial mindset, students were also asked to rate their level of confidence in specific skills or abilities, including interviewing for a job, managing personal finances and competing in a business (see Figure 11). Students’ mean confidence
ratings increased very slightly from the pre to posttest (p<.05) suggesting that students felt slightly more confident in their professional or workplace skills and abilities by the end of BizCamp.

Figure 11. Pre- and post-test means: Confidence, business skills

![Confidence, business skills graph](image1)

*p<.05; **p<.01; *** p<.001

Students also ranked a series of options regarding their future orientation and locus of control (see Figure 12). A comparison of mean rank for each category between the pre- and post-EMI suggests that students ranked the role of chance in determining their future lower (indicating that it is less important), on average (p<.05). Our results suggest no significant differences between the pre- and post-EMI for other categories (p>.05).

Figure 12. Pre- and post-test means: My future is decided by.....

![Future decision graph](image2)

*p<.05; **p<.01; *** p<0.001
In addition to measuring students’ entrepreneurial mindsets and perceptions of the program, NFTE also administered pre and post-assessments of students’ content knowledge related to four areas: opportunity recognition, market research, marketing and business financials. In order to assess change in content knowledge overall, we compare student scores—the percent of questions answered correctly—from the pre-assessment to the post-assessment, including only those questions that were in both the pre- and post-content-assessment. We also do not include assessment results for 11 students that were incomplete and missing more than half of the responses. Students scored slightly lower on the posttest on average, a mean of 64% correct compared to 67% correct on the pretest, however, these differences are not significantly different (p>.05). We also compared the mean score (percent correct) for each of the four content areas separately and found no signification differences between the pre- and post-tests for any of these domains (p>.05).

LIMITATIONS OF THE SURVEY FINDINGS

The interpretation of these results should take into account a number of caveats about potential biases inherent in the results. First, because the pretest and posttest content assessments use the same questions, we cannot distinguish the effects of taking the pre-assessment from program impacts. For example, it is likely that students learned new knowledge through the process of taking the assessment and by discussing the pre-assessment afterwards with their peers or program staff, and became more familiar with assessment format and types of questions, and thus were likely to score higher on the assessment regardless of their experience in the program, causing us to overestimate change over time. This problem is of particular concern given the short time period between the two assessments.

A second concern is related to content validity. It is not entirely clear the extent to which the questions measure or operationalize the domains and constructs of interest, and whether doing well on the assessment is predictive of developing a high-quality business plan, or of entrepreneurial success, for example. Another concern is the use of the assessment to measure change and the fact that the items are not necessary scaled to measure this change. For example, the assessment may not differentiate among top performers or among low-performers. It may be that students who scored high on the pre-test have no room for showing improvement on the post-test, which would result in underestimating change between assessments. A fifth concern is related to motivation. Students had little motivation for completing the content assessment and faced no consequences for scoring well or scoring poorly—and thus they were not likely to expend considerable effort. This problem was likely exacerbated by the fact that student had already taken the content assessment before and not fully engaged by having to reread old material.

Additionally, attrition from the pre- to post-test raises some concerns. It is likely that students who did not take the assessment were also the lower-scoring, less engaged students. Thus, differences between the pre- and post-tests might overestimate the impact. Furthermore, because students from three BizCamps did not take the content assessment and because
response rates for other sites were quite low, the results are not representative of the BizCamp population as a whole.

Finally, a research design that rests on using single group pre-test and post-test comparisons to measure program impact is problematic. By not including a comparison group who does not receive the treatment, we are unable to determine whether growth is due to natural maturation and the passage of time or an external event, although the issue of maturation is less of a concern given the two-week span between assessments.

PROGRAM IMPLEMENTATION: CONTENT AND STRUCTURE

The following provides an overview of our findings regarding NFTE staff and facilitator program implementation, focusing on common patterns across the sites as well as variations. Findings are based on site visits and observations, as well as interviews with NFTE staff, BizCamp and SUS program facilitators, teaching assistants, students and volunteers.

CLIMATE AND ENGAGEMENT

Our observations captured three measures of classroom culture: youth-directed relationships, staff-directed relationships, and youth participation. Results from observations suggest that program culture fostered positive relationships between staff and youth (see Figure 13) and youth and their peers (see Figure 14). Youth were friendly, collaborative and showed respect for each other and for staff. Staff used positive behavior management techniques when necessary, showed positive affects toward youth and were equitable and inclusive.
Figure 13. Staff-Directed Relationship Building

- Staff engage personally with youth, beyond task-related conversation: 57.2% adequately, 19.1% often or to a great extent
- Staff encourage youth to share their ideas, opinions, and concerns: 42.9% adequately, 28.6% often or to a great extent
- Staff attentively listen to and/or observe youth: 19.1% adequately, 57.1% often or to a great extent
- Staff show positive affect toward youth: 19.1% adequately, 71.4% often or to a great extent
- Staff are equitable and inclusive: 28.6% adequately, 66.7% often or to a great extent
- Staff use positive behavior management techniques: 14.3% adequately, 76.2% often or to a great extent

Figure 14. Youth-Directed Relationship Building

- Youth assist one another: 23.8% adequately, 61.9% often or to a great extent
- Youth are collaborative: 23.8% adequately, 66.7% often or to a great extent
- Youth show positive affect to staff: 14.3% adequately, 81.0% often or to a great extent
- Youth show respect for one another: 38.1% adequately, 61.9% often or to a great extent
- Youth are friendly to each other: 14.3% adequately, 85.7% often or to a great extent
Despite the challenge in engaging youth during the summer, our observations suggested that for the most part, youth were engaged and on-task throughout the class (see Figure 15). This is a notable finding, given the long days that most programs entailed, as well as the dense curriculum. However, engagement tended to drop off at the end of sessions usually during independent work when students who had completed tasks were waiting for their peers to finish. Additional structures, supports or procedures to differentiate instruction could address this tapering off of engagement at the end of sessions.

**Figure 15. Classroom Engagement and Culture**

![Bar chart showing classroom culture ratings]

- **Summary Classroom Culture Rating**
  - 14.3% observed adequate
  - 71.4% observed often or to a great extent
- **Student questions and comments often determined the focus and direction of classroom discourse**
  - 33.3% observed adequate
  - 28.6% observed often or to a great extent
- **There was a high proportion of student talk and a significant amount of it occurred between and among students.**
  - 14.3% observed adequate
  - 66.7% observed often or to a great extent
- **The majority of students were engaged and on task throughout the class.**
  - 23.8% observed adequate
  - 71.4% observed often or to a great extent
- **Students were intellectually engaged with important ideas relevant to the focus of the lesson or activity**
  - 33.3% observed adequate
  - 52.4% observed often or to a great extent
- **The classroom environment encouraged students to generate ideas, questions, conjectures, propositions that reflected engagement or exploration with...**
  - 19.1% observed adequate
  - 61.9% observed often or to a great extent

**LEARNING ACTIVITIES**

All activities observed focused on content related to entrepreneurship and business, and most focused on topics that were identified in the *BizCamp* guidebooks (see Table 5). Reflecting the end goal of the *BizCamps* and the fact that most of our site visits occurred during the second week of the program, the activity content most frequently related to preparation of the business
plans and presentations (approximately one-third of the observations). This focus was followed by topics related to marketing and sales, and revenues and expenses. Other topics of focus included business communication and conceptualizing business mission statements. In one case the activity was not directly related to the topics outlined by the BizCamp guidelines. Specifically, at a program site that elected to focus on the development of mobile phone apps, the central topic of the activity observed was related to computer coding.

Table 5. Major Content Area of Focus

<table>
<thead>
<tr>
<th>Content or topic of focus</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business plan presentations</td>
<td>33.3</td>
</tr>
<tr>
<td>Marketing</td>
<td>23.8</td>
</tr>
<tr>
<td>Revenues and expenses</td>
<td>14.3</td>
</tr>
<tr>
<td>Sales</td>
<td>14.3</td>
</tr>
<tr>
<td>Business communication</td>
<td>4.8</td>
</tr>
<tr>
<td>Business missions</td>
<td>4.8</td>
</tr>
<tr>
<td>Technical skills (Coding apps)</td>
<td>4.8</td>
</tr>
</tbody>
</table>

n=21

In most cases, the activity or lesson focused particularly on applying core ideas in entrepreneurship, usually in the form of students applying new knowledge or information to their business plans or presentations (see Table 6). Other common activities focused on developing communication skills, usually through oral presentations, and introducing or reviewing concepts related to entrepreneurship.

Table 6. Primary purpose of the lesson or activity: Percentage of observations by skill emphasized

<table>
<thead>
<tr>
<th>Purpose of the lesson or activity</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing ability to discuss, present and apply core ideas in entrepreneurship</td>
<td>76.2</td>
</tr>
<tr>
<td>Developing communication skills</td>
<td>61.9</td>
</tr>
<tr>
<td>Introducing new business/economics concepts</td>
<td>38.1</td>
</tr>
<tr>
<td>Reviewing business/economics concepts</td>
<td>33.3</td>
</tr>
<tr>
<td>Developing problem-solving skills</td>
<td>28.6</td>
</tr>
<tr>
<td>Identifying prior student knowledge</td>
<td>23.8</td>
</tr>
<tr>
<td>Developing conceptual understanding of business/economics</td>
<td>23.8</td>
</tr>
<tr>
<td>Learning economics or mathematics processes, algorithms, or procedures</td>
<td>19.1</td>
</tr>
<tr>
<td>Learning specific facts or vocabulary</td>
<td>14.3</td>
</tr>
<tr>
<td>Assessing understanding</td>
<td>9.5</td>
</tr>
<tr>
<td>Addressing misconceptions</td>
<td>4.8</td>
</tr>
</tbody>
</table>

n=21
Although lessons and activities often took place in a traditional classroom setting, for the most part, the learning activities were not focused on a teacher-centered lecture/discussion format that many high school classes traditionally follow (see Table 7). Most lessons involved independent research or writing and partner or group work in addition to teacher-led lectures.

However, almost all the activities observed included at least some time devoted to teacher lecture. Most of the activities that included a teacher lecture followed a similar format: the facilitator introduced a topic through lecture, usually using a power point presentation. Following the presentation, students then applied the knowledge by developing their business plans in pairs or individually. Often, students did so by adding in details using NFTE power-point slides as a template. In a few cases, however, the entire lesson or activity was lecture-based.

With the exception of teacher lectures and direction-giving, almost all of the most frequently-occurring learning activities were student-centered and focused on higher-order thinking. Moreover, in all but two observations, students were participating in at least one learning activity that required high cognitive demand, such as brainstorming new ideas, researching, analyzing arguments, gathering evidence or recording representing or analyzing data. Not surprising given that many of the sessions we observed focused on communication, in just under of half of the sessions students were preparing an oral presentation, and in a third of observations, students were presenting orally.

Table 7. Percentage of Observations by Learning Activity

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students listen to teacher lecture: giving directions</td>
<td>71.4</td>
</tr>
<tr>
<td>Students listen to teacher lecture: content</td>
<td>57.1</td>
</tr>
<tr>
<td>Students prepare an oral presentation</td>
<td>47.6</td>
</tr>
<tr>
<td>Students present (orally)</td>
<td>33.3</td>
</tr>
<tr>
<td>Students research topics related to entrepreneurship or business related topics</td>
<td>28.6</td>
</tr>
<tr>
<td>Students develop or analyze arguments, claims, evidence, strategies to support a position</td>
<td>28.6</td>
</tr>
<tr>
<td>Students create, brainstorm new ideas</td>
<td>28.6</td>
</tr>
<tr>
<td>Experiential learning/problem solving /simulation: student led</td>
<td>28.6</td>
</tr>
<tr>
<td>Students take notes</td>
<td>23.8</td>
</tr>
<tr>
<td>Students record, represent and/or analyzed data, such as financial or market data</td>
<td>23.8</td>
</tr>
<tr>
<td>Students prepare a written report</td>
<td>23.8</td>
</tr>
<tr>
<td>Students answer worksheet/textbook questions</td>
<td>23.8</td>
</tr>
<tr>
<td>Students collect data or evidence</td>
<td>19.0</td>
</tr>
<tr>
<td>Discussion: teacher led</td>
<td>19.0</td>
</tr>
<tr>
<td>Discussion: student led</td>
<td>14.3</td>
</tr>
<tr>
<td>Students read written communication about entrepreneurship or business-related topics</td>
<td>9.5</td>
</tr>
<tr>
<td>Experiential learning/problem solving/simulation (e.g. mock negotiation, sales call): teacher led</td>
<td>9.5</td>
</tr>
<tr>
<td>Students listen to Business volunteer/guest speaker (feedback)</td>
<td>4.8</td>
</tr>
<tr>
<td>Business volunteer/guest speaker: individual coaching</td>
<td>0.0</td>
</tr>
</tbody>
</table>

n=21
Lessons and activities were generally well organized and structured, provided significant time for students to learn and practice skills essential for entrepreneurship. With few exceptions, students had extensive opportunities to collaborate in partnerships or small groups, and lessons almost always included a problem-based or project-based approach and focused on content that students found significant and worthwhile (see Figure 16). Students also spent a significant amount of time generating original ideas and solutions using appropriate information and tools, and communicating their ideas through a variety of media – usually written format, using PowerPoint presentations, and oral presentations. Students had access to appropriate resources and for the most part, an appropriate amount of time was devoted to each part of the lesson.

Figure 16. Activity or Lesson Structure
A few items were consistently present during observations but the quality of implementation varied. While students were often pushed to explain their reasoning, present evidence to support claims and assertions, the reasoning was often superficial and facilitators generally did not have time to press on students’ rationales.

Additionally, less present in observations were examples of students providing feedback and giving constructive criticism or challenging ideas of their peers. One critical challenge in increasing peer feedback in order to foster a critical thinking environment is ensuring that environment is open and supportive enough to foster creativity and innovation while keeping students accountable. For example, in one observation where critical feedback was present, the manner in which it was communicated upset and in one case, distressed, students receiving the feedback so that a few students either shut down or did not cooperate in other activities.

Opportunities for youth to take leadership roles were also minimally present. The initial direction and focus of the lessons were usually teacher-directed, and activities to develop leadership skills were few. Similarly, small-group work was also occasionally unstructured. For example, in a few observations, some individuals dominated group-work interactions or consistently spoke for the entire group.

**Figure 17. Content of Activity or Lesson**

<table>
<thead>
<tr>
<th>Content Rating Overall</th>
<th>Percent of Observations Where Activity or Behavior Was Observed/Demonstrated Adequately</th>
<th>Percent of Observations Where Activity or Behavior Was Observed/Demonstrated Often or to a Great Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students communicated their ideas to others using a variety of means and media throughout the lesson/activity.</td>
<td>28.6</td>
<td>57.1</td>
</tr>
<tr>
<td>Students challenge ideas, provide feedback, or give constructive criticism.</td>
<td>38.1</td>
<td>38.1</td>
</tr>
<tr>
<td>Students generate original or creative ideas or solutions, utilizing appropriate information and tools.</td>
<td>33.3</td>
<td>19.0</td>
</tr>
<tr>
<td>Students generate alternative solution strategies, and/or different ways of interpreting evidence.</td>
<td>9.5</td>
<td>57.1</td>
</tr>
<tr>
<td>Students provide appropriate or compelling evidence to support claims and assertions and explain their reasoning.</td>
<td>28.6</td>
<td>42.9</td>
</tr>
<tr>
<td>Written and verbal content information presented to students was accurate.</td>
<td>52.4</td>
<td>38.1</td>
</tr>
<tr>
<td>The instructional strategies and activities used clearly connected to students’ prior knowledge and experience.</td>
<td>0</td>
<td>85.7</td>
</tr>
<tr>
<td>The content was significant, worthwhile, and developmentally appropriate for participants</td>
<td>19.0</td>
<td>71.4</td>
</tr>
</tbody>
</table>
STAFF BACKGROUND AND PREPARATION

STAFFING AND RESPONSIBILITIES

Most programs were adequately staffed by two to three qualified staff members, usually one or two teachers focusing on instruction and one NFTE staff member providing logistical support. A few program sites also used interns or teaching assistants. One site seemed insufficiently staffed with only one qualified instructor for over 40 students. Although the class was supported by a few teaching assistants, these assistants did not hold the instructional expertise or deep content knowledge to provide the skillful instructional guidance needed.

Surprisingly, larger class-sizes were not always associated with higher numbers of qualified staff. As a result, the amount and quality of individualized feedback and support for students varied across sites. For example, at one site with a sizeable staff, each staff member was assigned a small group of students for whom they were responsible for tracking, checking in regularly and maintaining progress. And at another site, one facilitator supervised and tracked the progress of business plans for over 20 individual students or partners. One staff member involved in two different program sites with different numbers of participants contrasted the two experiences:

The kind of larger number of students I think maybe wasn’t as effective as the smaller model. [At the smaller camp] I think that they walked away with more time to work on their business plans ... because it was a smaller number, able to grasp concepts a little more. It became more interactive within the day and so they became more comfortable with each other and I think that that structure worked well and maybe it’s just because it was a smaller group.

Program facilitators focused on designing and delivering instruction and working with students. They generally were not involved in planning or program logistics. Facilitators were usually teachers who taught the NFTE curriculum during the school year. Facilitators’ roles in planning the program curriculum that they were to implement varied, perhaps reflecting some uncertainty about the extent to which the program, as outlined in the guidebook, can be modified. For example, while more than half of facilitators reported that they were involved in the planning process—outlining sessions, developing lessons, the agenda and key items, other facilitators reported that they were not involved in planning but rather, hewed closely to the curriculum and agenda that NFTE provided, often taking direction from NFTE staff. One NFTE staff member described the process:

I mean, I know it’s a national curriculum, so I don’t think there was a lot of [leeway], in terms of the order things go. You know, give your teachers a little bit ahead of time and have them help out with the planning of it. When to do this activity, when to do that activity. But I think a lot of that comes from the national headquarters, and I don’t know if there is a lot of wiggle room with that.

NFTE staff generally focused on providing logistical support for the program, in some cases on-site daily, and in other cases, a few times during the week. These activities usually included planning prior to the start of the program, recruiting students, recruiting teachers, liaising with
any organizational partners, and daily tasks related to coordinating space, transportation, and food; managing business volunteers and mentors; and organizing field trips. Program facilitators reported that these types of supports were one of the most important resources provided by NFTE. Additionally, in a few cases, NFTE staff stepped in to support the instructional program and worked with students directly, delivering specific sessions, or more frequently, working daily with students one-on-one on business plans on what topic the facilitator had assigned. A few sites hired teaching assistants— but these individuals mainly provided administrative support rather than instructional support.

STAFF BACKGROUND

Staff supporting the program sites brought considerable experience and backgrounds related to both business and instruction. All staff – facilitators, NFTE staff – had preparation in either business or education. Individuals who worked directly with students to help them learn and apply the content had the most expertise in business and teaching business-related topics. All facilitators—those responsible for delivering instruction and working with students directly—had prior experience teaching. Almost all were seasoned teachers with several years of experience teaching subjects related to business or the NFTE curriculum itself. A few teachers had two or three years of teaching experience. Facilitators also had extensive content knowledge of business and entrepreneurship. More than half of the facilitators held a degree in business or had experience working in a business, although only a few had experience operation and running their own businesses.

With the exception of two individuals, facilitators were implementing the *BizCamp*/SUS for the first time. However, all but two of the facilitators had taught the NFTE program during the school year and thus quite familiar with the curriculum and expectations. This experience provided facilitators with valuable context—program staff felt that prior experience teaching NFTE was essential to effectively delivering the program curriculum, particularly given the challenge of requiring students to acquire an extensive amount of new content over such a short period of time, and that this was their first time implementing the program curriculum.

I think the more times you do it, the better you get. I mean there’s teachers in schools that each this as part of their curriculum every year. They’ve been doing it for years….I see some advantages in knowing what works better and how to pace the course and that sort of thing.

Similar to the facilitators, NFTE staff supporting the program sites had experience in education and instruction, and to a lesser extent, business and entrepreneurship. Most NFTE staff supporting the program sites had experience teaching either in schools or more informal settings, often business-related subjects. A few staff did not have any experience in business or entrepreneurship beyond their involvement with NFTE.
STUDENTS

STUDENT RECRUITMENT

Local staff and facilitators reported facing significant challenges in recruiting a sufficient number of program participants. Staff attributed these challenges to three main factors. First, sites began recruiting participants late in the school year (from April onward), a time when many students had already made summer plans. Second, BizCamp sites were asked to recruit students with no prior exposure to business or NFTE curriculum. Third, staff at established BizCamp sites reported that the number of participants they were expected to recruit increased significantly from previous years.

The most common method to recruit students was through educator networks. Most NFTE staff relied on their existing network of NFTE-affiliated schools and often got word out to students through teachers who teach the NFTE curriculum during the school year. Most BizCamp facilitators teach the NFTE curriculum during the school year and thus were able to recruit some students from their school-year classes or from their school. The new criteria to increase enrollment and serve students with no exposure to NFTE made recruitment more difficult, particularly for the sites whose networks consisted mainly of NFTE teachers in NFTE-affiliated schools. While these staff continued to recruit participants through existing networks of NFTE teachers at NFTE schools, they also expanded the scope of their outreach to non-NFTE schools and other local youth organizations (ranging from the Mayor’s office, to colleges, to church groups, to after school programs). In some cases staff recruited at schools that had not yet introduced NFTE into their curriculum but planned to do so. Most sites ended up recruiting students from between four to eight schools and in a few cases more schools.

In a number of sites NFTE staff relied wholly or in part on local organizations to recruit students. This strategy met with varied success. Some sites reported that the intermediaries supplied them with students who were a good match for the program. Other sites reported that the intermediaries did a poor job of selecting students who would be motivated to actively participate in the BizCamp. In those sites reporting poor recruitment results from their partnering organization, the partnering organization staff appeared to have little understanding of NFTE:

I heard from a few students that they weren’t really told what the camp was and I think that was the problem. They were kind of not given the story. They were told oh you’re going to go to this camp, they weren’t told what the camp was.

Conversely, in those sites reporting positive recruitment outcomes, local staff had ongoing working relationships with these organizations.

They promote the program. They work closely with the schools so they have the ability to screen the students and they bring knowledge of the community and the families. They know students’ background. They are involved in recruiting and selecting students – who to target, who could benefit.
At least four sites found their initial recruiting drive insufficient and were left scrambling to recruit more students at the last minute.

We were reaching out towards the end of the year when students already had summer plans. Their brains weren't necessarily on, you know, this particular program. They were already kind of either checked out or had already planned, you know, vacations or summer jobs or something. The schools didn’t really prove to be so successful at the time period that we were recruiting.

In a number of cases fewer students showed up at the program than anticipated. At some sites staff reported calling students multiple times to ensure they were planning on attending the program. Some staff recommended over-enrolling participants with the expectation that some enrollees will not show. Staff reported that one-on-one encouragement of students to participate from a trusted personal contact (such as a teacher or guidance counselor) was much more likely to yield enrollees that showed up than email blasts to lists of principals, teachers or after school programs.

The email, just blasting outreach is not the most effective. It is not really what draws students and compels them to actually apply for this. I think when we’re able to sit down—I think may have had a couple of conversations with parents or school advisors or counselors, people who are more in that advisory capacity, and those are really, really effective in getting those students to apply.

Among the student participants interviewed in focus groups, the vast majority reported choosing to participate in the *BizCamp* as a result of encouragement from a personal contact such as a teacher, mentor, counselor, sibling, friend or parent.

One consequence of the need to recruit more students on a short timeline was that only a few sites reported being able to select and screen students. All the other sites reported accepting all applicants regardless of ability or motivation level. A number of staff at a number of sites expressed some version of the following statement:

With the *BizCamps*...it became a numbers game so I couldn’t look at the applications in a way of like, would you be a strong candidate for this program and have good takeaway, because it was more about making sure that I got as many applications as I could. And so at the end of the day honestly we accepted every student that applied because we didn’t have the capacity or the ability to deny students because we had to reach our numbers point.

Recruitment through personal contacts allowed staff to target students who had the most interest in learning about entrepreneurship.

Because the program is limited to students who have never taken NFTE before, it was a whole new set of marketing strategies that we had to use. In the end we found that working within the community and working with the school guidance counselors, created much more productive in the recruitment process, as opposed to [posting] in the paper and then going to school administrators. It was really about getting the word out into the community and the guidance counselors
identifying those students who were currently not in summer programs that would qualify and be interested.

The competition and stipend at the end of the program was a significant motivator for students, and program staff felt it was a key component to the program. Some students received stipends or travel stipends or both. Stipends ranged from $50 or $200 for the two weeks up to minimum wage for each hour attended. Staff members felt that even the smallest stipend was a significant resource that motivated students to apply and attend the program and minimized attrition—and that it was particularly important for students who came in with less motivation. As an additional incentive, one program site partnered with the local school district, and arranged for students to receive credit for community service hours that would help to fulfill a graduation requirement. At the sites that did not offer stipends (or where students thought there were no stipends offered) staff reported that the lack of a stipend contributed to difficulty in recruiting enough participants. At the same time, both facilitators and students commented that while the money was a necessary component of recruitment, it was not sufficient to ensure a motivated or well-matched pool of participants.

If you come for the money, it's going to show. It's really going to show. Yeah. It shows in like the first or second week. So if you're going to do it for the money, I suggest you don't join for the money. Try and join for the education.

Rather, staff reported that offering monetary stipends for participation and screening for motivation were both key components to selecting a well-matched group of participants.

I have to say, for a summer camp, and you know, I've run a lot of summer camps, in the past, that were non-NFTE summer camps, and I used to have large attrition rates...We [at this BizCamp] provided a stipend as long as they completed the entire camp, the entire two weeks. They had to be there every day.

STUDENT DESCRIPTION

The BizCamp and SUS participants generally ranged from rising 9th graders to rising 12th graders. All four grade levels were represented at each BizCamp. A few sites included eighth graders and a few included rising college freshmen. At one site about 30% of their participants were college students.

Staff described most of the participants as coming from low-income communities and primarily students of color (African American, Latino and Asian). Two program sites were all female, by design. Staff described participants’ academic backgrounds as representing a range of academic achievement. Staff at most sites also indicated that motivation varied. The majority of students had a prior interest in entrepreneurship and many had prior exposure to business curriculum. A smaller group of students in each program site had little to no initial interest in entrepreneurship and no prior knowledge of the business curriculum. In reflecting on the impact
of the program, facilitators commented that the less-motivated students generally got less out of the program than students with initial motivation and interest.

The problem comes with the student’s motivation to want to be there. It’s not that they couldn’t learn it, because they could.

In the case of the Summer Startup sites, staff described participants as high-achieving and motivated. In focus groups at selected sites, students reported they wanted to attend the program to have the opportunity take an idea they had and turn it into a business, learn how business works in general, or gain more skills and tools with which to run an existing business.

Despite the difficulties that the wide range of academic preparation might present, facilitators reported that the curriculum was appropriate for participants of all academic abilities.

I don’t think one end or either end of the curve really moved a whole lot more. I think the whole curve moved. I think that was one thing that I was impressed about the program or at least the way it turned out. Everybody got something out of it.

Facilitators indicated that because the curriculum required practice in core foundational academic skills, students of different abilities are able to learn something of value. In addition to learning basic knowledge about how to run a business, students must practice research, writing, math and communication skills throughout the two weeks and program staff felt this was beneficial to students along the entire range of ability-levels. For students with weaker academic backgrounds, the ability to apply academic math skills to hands-on financial problems was one of the largest challenges. However, some facilitators reported that math review lessons were able to get students up to speed within the course of the BizCamp. A few facilitators believed that prior business content knowledge (through a school year NFTE class or another business class) was an advantage in student’s ability to apply business concepts more quickly.

Facilitators describe the BizCamp curriculum as student-centered and open-ended. Because the business plan presentation involves a comprehensive set of skills and is individual or partner-based, staff felt this culminating product allowed students to develop their ideas to as advanced a degree as they would like.

I think it can be as complicated and sophisticated as you make it… So yeah, it just needs a lot of individualization, which actually was probably a good part of what the agenda was…A lot of me and the other staff just sort of float around and work individually and kind of add in those extra levels to the students as they needed it.

Many staff described the mixed levels of motivation and ability of the participants as both a challenge and an opportunity. The student-centered nature of the program provides many opportunities for partner work and student interaction. In some cases the most enthusiastic and knowledgeable students helped motivate and push their less-skilled colleagues to achieve more. In other classes where the staff described the majority of participants as less interested in entrepreneurship, this positive peer dynamic did not occur. In general, facilitators and staff
thought that mixed-skill-level classes provided opportunities for peer coaching and differentiated instruction, if structured properly.

**PROGRAM SPECIFICATION AND TRAINING**

The program objectives, activities, and measures of the program are clearly described through the NFTE curriculum and well-understood by the facilitators. However, there is some variation in goals that facilitators in different sites chose to emphasize, which is also evident in the adaptations that different facilitators and staff made.

The vast majority of program facilitators taught NFTE during the school year, and therefore did not report receiving training specifically to implement BizCamp. Rather, they relied on elements of the program guidebook and their existing knowledge of the NFTE curriculum and expectations to implement the program. Facilitators did not report using the training manual extensively—almost all staff reported that the guide was too dense to use in planning. Many facilitators reported that they relied primarily on the agenda and prepared power-points and templates to plan and implement the program. Perceptions of the extent to which the agenda and guidebook could or should be adapted varied, suggesting that the expectations regarding fidelity and the core inflexible elements were not clear to staff and facilitators.

Facilitators who did not have prior knowledge of the program curriculum did not feel as prepared to implement the program. For example, a few program sites hired instructors who brought deep content knowledge, but who also had less experience teaching the NFTE high school curriculum. Although they attended some NFTE training sessions regarding program curriculum and program, these facilitators reported not having a clear understanding of the main emphasis of the curriculum, appropriate pacing and expectations regarding academic knowledge in the curriculum versus the knowledge that is needed to complete the business plan. Additionally, in some cases the pedagogical style and curricular adaptations were different from the facilitators who teach NFTE during the school year.

Facilitators and staff also felt that they had inadequate time to plan and prepare for the program, and local contingencies, such as lower or higher number of students in the class than expected, having to drop one to two instructional days, variation in the quality of student preparedness, number of support staff, and changes in field trip plans required last-minute adaptations to the program. Even for experienced NFTE teachers, rearranging a tight two week curriculum to account for these changes was challenging. Many of these contingencies were foreseeable—for example, due to policies at the facility where the program was located—and therefore avoidable. Longer lead time, refining the systems to support planning, or use of veteran teachers who have implemented the program might prevent these sorts of problems in the future.

**GOALS AND ADAPTATIONS**

NFTE staff described the goals of the BizCamp curriculum in a variety of ways. Nearly all facilitators described the goal of the BizCamp as teaching students important content
knowledge about how a business runs along with general math, writing and presentation skills that will be important throughout their lives. Others also identified goals related to students’ personal growth and exposure to career pathways. A few facilitators described the goal of the BizCamp as primarily to complete the business plan and in one case a facilitator criticized this goal as too narrow.

The variation in answers to this question implies that NFTE staff share a common understanding of the goals of the curriculum, but do not share a common set of aspirations for the program itself. Some appear to aim much higher than others, which may in part be a function of the resources and opportunities they can bring to bear.

Most facilitators described the BizCamp curriculum as a tight, structured and “streamlined” curriculum with little space for adaptation. In contrast, at the program level, in most cases, adaptations involved eliminating activities from the curriculum due to time constraints and the pressing need for students to have a polished business plan at the end of the two weeks. When facilitators were able to add activities they were usually short, such as an extra video, or an additional guest speaker. Local facilitators viewed the business plan presentation as prescribed and non-negotiable.

But I don’t think [just plugging and playing the curriculum] is really the NFTE spirit and I do think just in general local office have been given reigns. I think a good part of it is local offices have been able to be a part of it and really help with major programming … to give the students what they need and to really empower local staff to build on part of the basic building blocks.

More than half the sites cut the wholesale event field trip activity for logistical reasons or time constraints, such as the perceived need for more classroom instructional time and presentation rehearsal time. Other sites kept the activity—one staff member explained that it provided students with a unique opportunity to take or not take a risk and experience the repercussions of that decision, as well as to reinforce content knowledge related to entrepreneurship.

One BizCamp site deeply adapted the BizCamp curriculum to meet their local needs. This site already had initial plans for a summer program to be coordinated with other local organizations prior to the new program guidelines established for this year. Rather than jettison their original plans, this site chose to blend the requirements of the national NFTE office with their own plans to create a program focusing on e-business. Staff at this site described their program as “sort of a hybrid” between the new program guidelines and “what we set out to do in the first place.” Another focused on the NFTE BizCamp curriculum but extended the program for six weeks, with days that ended at 2pm instead of 5pm.

Many staff at this site also viewed the program as an opportunity to test out ideas for new curriculum and activities that, if successful, could be incorporated into programs during the school year. This included the focus on e-businesses as well as smaller adaptations, such as refining learning supports for understanding business finances. Thus, program sites could also serve as a means to pilot new ideas for the school year—successes could inform planning and programs in the fall.
At a more micro-level, all teachers adapted their lessons to meet the particular student skill levels in the classroom and their innate sense of the most important aspects of the curriculum to reinforce. This process was far easier for facilitators who had already taught NFTE curriculum in the past. Those who did not struggled more with what components were most essential to keep or emphasize, and which were not.

Assessing the need for and finding time to implement these curricular adaptations was one of the most challenging aspects for facilitators. Facilitators and program staff consistently cited the opposing pressures of completion of the business plan versus comprehension of the content. Many felt that the program was output driven at the expense of deeper comprehension. The time constraints also virtually eliminated time to assess student learning, much less reteach concepts. As a result, while facilitators may have covered all topics outlined, they chose content to emphasize and areas to skim, and did not have time to align these decisions to whether students had mastered the content.

I struggled a little early on with the balance between the necessity for the kids to develop a presentation, make a presentation, and compete at the end of 10 days and what I was really unclear about was the expectation about how much academically did we have to prepare them. So in other words, the text, has concepts and things in it about business and entrepreneurism that is important to know and the kinds of businesses and how to create a business then and things like that.

There is no time for reteaching. There is no time for, you know, really gauging the learning process. Evaluating the learning process. I mean we are basically telling them what to do. They are not investigating on their own.

RESOURCES

NFTE RESOURCES

Program facilitators felt that they received a substantial amount of support in terms of manpower and materials from NFTE as well as from partner organizations. As mentioned above, NFTE staff provided key logistical support for program sites. They arranged for facilities, helped with student recruitment and organized field trips, volunteers, guest speakers, and judges during the programs. Some also facilitated some of the curriculum and provided direct feedback and ideas regarding program facilitation, although this type of support was less common. Program facilitators felt that the logistical support was one of the most important resources provided by NFTE, allowing facilitators to focus all of their time and energy on student learning and instruction.

We had an on-site program coordinator. He was there through the entire two-week BizCamp. He was there to assist us if we had any supplies we needed.
Anything we needed, we could just ask [him]. He had all the logistics, communicating with the staff and making sure we would have the exact types of classrooms that we needed, whether we needed a computer lab, whether we needed an area where the students would practice presenting their businesses. All that was provided. Again, anything we needed, all we had to do was ask for it.

Essential NFTE resources that program staff reported using included templates for the business plan and power points and materials for the experiential activities. Having these resources readily accessible saved facilitators from spending time organizing and searching and allowed them to focus more on planning and delivering instruction. NFTE Connect was another important resource noted by a few teachers to access materials that were not in the guidebooks or textbooks. In addition to NFTE materials, many program facilitators relied on their own materials they had developed while teaching during the school year. Reliance on other outside resources was minimal, and included resources such as videos from “Shark Tank” television series or business plans or videos of presentations from prior students.

I think the major strength that they have is the program itself. *BizCamp* compared to a year-long course or some extra course is that tried and true then you know. They have wonderful activities. They’ve got some wonderful information. The textbook is great, easy to read. You have access to the computer. You can always go on the NFTE website and learn about other NFTE programs, as well as information on others beyond teenagers who have benefited from the program, who participated in the *BizCamp*. I think it is really great. There’s so much involved with NFTE programs.

Computers were key resources for students. Not all students had one-to-one computer access, and some program sites had students work in pairs to address the limitation. Additionally, staff usually had to rely on themselves to provide tech support unless the computers or computer lab were provided by the partner organization where the program site was located. Most students had access to textbooks but facilitators reported that they did not use them, except as a reference guide if students wanted to conduct research outside of class. Staff at program sites that ran longer than two weeks were more likely to report using the student textbooks and workbooks. Students also received some supplies, such as notebooks, pens, USB drives and backpacks.

Staff in some sites felt that the guidelines for use of funds were too restrictive, either in the timing or in the requirement to serve a certain type of student for example. A few staff also reported that they had trouble accessing the funds in a timely manner, which served to delay activities in some cases.

**OUTSIDE PARTNERS**

Organizational partnerships provided program sites with key resources. These included partnerships with local colleges, school districts, social service agencies and nonprofits with aligned missions. About half of the program sites partnered with local community colleges or
universities, who provided classroom facilities for the programs. Some also provided access to their computer labs and cafeteria. Holding the program at a college allowed the staff to provide students with both formal and informal opportunities to learn about higher education opportunities. Some staff also felt that holding the program on a college campus provided students with the sense that they are being invested in. In a few cases, the colleges also helped to recruit students through their website or through connections to groups of high schools they were already serving in another capacity. One intensely involved college partner assisted with fundraising for the program, student recruitment and selection and coordination of logistics, such as field trips and guest speakers.

Impetus for establishing the relationships with the SUS and BizCamps varied – a few colleges offered a variety of summer youth programs and thus incorporated the program into this type of outreach. The community colleges involved had existing entrepreneurship and community programs—the BizCamps fit into their core mission and provided them with an opportunity to market and recruit students.

The remaining program sites used facilities at local high schools or nonprofits, usually offered at a discounted rate or at no charge. Schools tended to be less involved in supporting delivery of the program compared to the role of the universities or colleges, but staff often were able to recruit a number of students from the school where the program would be located. Two program sites were located at nonprofit organizations whose role in the program, in addition to providing facilities, varied from helping to recruit students to significantly more involvement. Specifically, at this technology-focused BizCamp, staff from the organization partner had the expertise in technology and therefore were deeply involved in planning and delivering the program curriculum.

We were…lucky enough to have someone from [the site] that was…there, on campus, during the time that we had the camp. So, any logistical issues that we had, like you know we had delivered books, like we had, you know making sure that the lunch was delivered on time, like we had water available for the kids, like the bathroom – all the logistical things that we needed, that we had somebody that can pick up the phone and call and said hey, you know I need to have some paper in the bathroom or whatever. So, that the location was good, because they were able to arrange…all these little things that you know that could be a major thing. So, all these little things were also taken care of for us throughout.

A few program sites were also closely connected to city agencies, such as the city youth bureau, mayor’s office or agency that provided summer youth employment. These city agencies were most helpful in recruiting students. At a few program sites, they also provided youth participants with stipends through the youth summer employment programs. One barrier to working with city summer employment programs was the short time period of the BizCamp: city summer employment programs last six weeks, in contrast to the two-week BizCamp. To address the mismatch and take advantage of the funds for student stipends, one program site ran for six weeks rather than two (with slightly shorter days), another site arranged for the students to attend the program for two weeks and then move to another place of employment...
for the remainder of the six-week youth employment program. One site partnered with the city agency overseeing youth employment but only the students who applied through the city agency received stipends during the two weeks.

On occasion, however, the involvement of additional outside organizations added confusion. For example, staff reported that students in one site had signed up for the program not knowing that it was an entrepreneurship program or that they would be required to develop and present a business plan. Staff at a few sites with strong collaborative partnerships also remarked that although involving multiple partners brought more resources to the programs, it also served to complicate the planning and communication process, and it was difficult to identify where the authority for decision-making rested.

VOLUNTEERS

Volunteers brought business expertise and provided essential feedback to students, particularly as students developed their business plans. Most volunteers attended two to three sessions over the two weeks of the program, usually working one-on-one with students during the second week – for example, working with a student for 20 minutes to provide feedback on a business plan or presentation and then rotating to a new student for another 20 minutes over the course of a few hours.

A few sites departed from this model slightly. For example, one site used volunteers to provide instructional support for the most challenging concepts to understand. The site brought in more volunteers to work with students to understand business financials in small groups because staff felt this was a particularly difficult topic for students to understand. Another site brought in volunteers to work with students during the first week to get in early in their business plan development.

Volunteers were mostly recruited from pools of school-year volunteers, while some sites relied on Citi Foundation volunteers entirely. Other sites recruited from their business partner organizations such as local universities (MBA programs) and business incubators or accelerators tied to the entrepreneurship community. A few sites struggled to recruit more than two or three volunteers, partly because of the limited planning time prior to implementation.

The volunteers were more involved in the Startup Summer sites, meeting with students weekly and depending on their relationship, emailing or texting regularly. Therefore, the lack of match between students’ industries of interest and mentor backgrounds was more of a concern for the Startup Summer program. A few program staff members and students in focus groups suggested that identifying mentors from a broad array of industries would provide students with better support. A few sites also cited concerns regarding volunteer consistency, and often chose to rely on volunteers who had already been vetted during the school year or encourage the employers’ corporate responsibility or community engagement departments to provide a layer of accountability to ensure the volunteers are committed.

Alumni volunteers were another resource for a few sites where they had alumni present their business plans, or talk about their business and the start-up process. They also often served as
unofficial coaches and role models at these sites, helping partners negotiate conflict or offering assistance and suggestions for business plans.

**ADDITIONAL RESOURCES**

Most staff reported that they felt they were well-resourced for implementing the program. Staff who thought additional resources would be helpful usually requested the types of resources that were already provided at other program sites – for example, stipends and transportation assistance for students, access to computers for each student, a teaching assistant, and more guest speakers and volunteers to work with students individually. A few staff, emphasizing the importance of partner organizations to help facilitate the work, suggested that establishing deeper partnerships with more community or business organizations would be helpful, particularly in facilitating recruitment of students, volunteers, field trips and guest speakers.

Facilitators in programs with the largest classes noted that the large class-size was a challenge. It took longer to build relationships with students, they received less one-on-one attention than in smaller sites, and organizing field trips and finding additional mentors was difficult. A few of the staff members who both taught and handled logistics reported that they felt they were stretched too thinly to do an adequate job—and, for example, they did not have as many guest speakers and field trips as they would have liked. Similarly, in these sites, students indicated that they needed more time for individualized feedback from instructors.

A few staff felt that the training and professional development was not enough for inexperienced teachers, who often did not have a full understanding of the end goal or of the expectations for learning specific content. Finally, a few students who were located in sites without access to a computer lab reported that the software and computers were not sufficient, and requested access to Adobe Illustrator and to support website development as well as access to less buggy or more powerful computers.

**PERCEPTIONS OF PROGRAM STRENGTHS**

Program staff perceptions of program strengths varied, and were generally related to elements of the program design, resources and staff NFTE provided, and how students were impacted by the program.

Many staff felt that the program strengths lay in how it challenges students to meet high expectations and the student learning and growth that results. As one staff member stated, the program sets a high bar and students meet it. Program staff also reported that the business plan and competition provided students with a strong sense of accomplishment. Students also listed this aspect of the program as a strength – that the program treated them like “adults” or “college students,” and that one of their favorite aspects of the program was the chance to develop a project individually.
An equal number of staff identified the relationship-building aspect of the program as its main strength. In the program, students build a community and develop supportive relationships. In a strong community, students are motivating each other to accomplish the work. Staff also remarked that the chance for students to interact with a diverse group of students who had varied experiences and interests was a program strength. A few staff suggested that the program could be further strengthened by including more explicit community-building activities in the beginning of the program.

Another frequently noted strength was the power of the program to engage students. Many staff reported that the program engaged students regardless of the skill levels with which they started the program. Many staff attributed this to the program design: project-based activities and student-centered learning engaged students and served to develop teamwork and communication skills as well as business knowledge. A number of students indicated that they enjoyed the hands-on, active nature of the program design and that they were pleasantly surprised to not be “sitting in a room and people were just going to be talking all day and we were just going to have to sit there…. The program has come out to be better than that. We've learned. We work together. We play games. We went on trips. It's more than what I was expecting.” A few staff noted that the program’s strong curriculum enables students to develop high quality final products.

A few staff reported that the program made content that students learn in school—such as math, reading, writing, working in groups, presentation skills—relevant to their lives. Other staff noted that the daily oral presentations that students made served to greatly improve their communication skills. The autonomy of the program allowed students to become more comfortable and confident thinking and working independently.

Some staff felt that holding the program in the summer held many advantages. Compared to school-year programs, students are able to dedicate an intensive amount of time to deeply engage and grapple with the material and the problem during the summer. Offering the program during the summer also provided students who wouldn’t otherwise have access to the program at their school during the year with an opportunity to learn about entrepreneurship.

But I think the strength of it is…it was so nice to be able to just teach NFTE, you know, [the facilitators] come in, they teach NFTE, they have the time for them to do all these mental activities. They were just focusing on NFTE. I think that was nice, because…the kids really had the time to really delve into the curriculum and really understand it.

Bringing all those kids together is something I think is really unique to this program versus the overall [school year program]—not that the overall program doesn’t do that, but it just has been particularly strong this [summer]. When you do it 9:00 to 5:00, it’s just, you’re in that mode. That’s what they’re thinking about and I’ve seen kids come back the next day because they’ve been thinking about it all day and they can’t get it out of their heads.
Many staff cited the field trips, guest speakers and in particularly, mentoring, as valuable program components. For example, through the field trips and mentoring, students learned how to behave in professional environments and alternate career pathways. Staff and students at the Summer Startup sites in particular felt that mentors provided a valuable resource, but that more screening needed to be done to ensure that the mentors would provide reliable and consistent support to students throughout the program. Similarly, during almost all of the student focus groups, students cited their interactions with business professionals through field trips, guest speakers and volunteers/mentors as one of strongest aspects of the program. The students valued the ideas, feedback and business experience that these outside volunteers brought, and how their experiences illustrated some of the lessons embedded in the program. For example, one student described one of the guest speakers who discussed her experience as an entrepreneur to the group who drove home the need for initiative and persistence in the face of failure:

we had an entrepreneur come in herself, she's become successful but she explained that she was turned down many times but if you're persistent, not only do you have the knowledge or you can gain the knowledge in the process, but also starting a business...also comes from yourself. So if you're not into it, then you and your knowledge is really useless because you're not driving yourself to do anything with it.

Another staff member described the role of volunteers in motivating students:

The volunteer gives advice. The student is really definitely more likely than not going to follow it and follow up, and then express that to me in some way. And that's like, 'Oh, Rob told me I need to do this—and always because the volunteer said so. And so, it's—for the teacher and I, we laugh because, we're like, 'We told you that 20 times and you don't listen to us.' So there's that new authority figure that comes in that I think impacts the kids, if only in keeping them interested and validating what they're doing in their business plan process.

A student also provided an account of interactions with mentors, possibly also reflective of growing comfortable with feedback:

[The volunteers] rip us to pieces and then we rebuild to make a better model. That's really what they do...They have a lot of really great ideas and feedback, so it just makes you go back and think about it on your own and make it better. Their ideas really are great.

A number of staff cited as strengths the motivated, enthusiastic, passionate, committed and knowledgeable staff support the program and push students to do their best work. Students echoed this sentiment. Most of the students who we talked with indicated that the individualized attention facilitators provided was one of the best aspects of the program, and that program facilitators were responsive to student questions and made them feel that they cared. A few students, at the smaller program sites, attributed this support in part to the small class sizes. NFTE resources were another strength many staff cited, such as sources for activities and
lessons, textbooks, computers and the NFTE website. One new facilitator described the strengths of the program:

I think the way [students] change, the resources, the community involvement is phenomenal, the people in the NFTE program. I can’t say enough about the people. I’m telling you [NFTE staff supporting the camp] are phenomenal people. The other program members that I met were wonderful from corporate level. I was so impressed. …I’m coming in as a newbie, not really knowing anything about NFTE, totally impressed and I’ve said to everybody at NFTE I’d be proud and honored to work with you in the future on whatever projects that you have

Similarly, a NFTE staff member, when asked about program strengths, described the role of the experienced facilitators:

Having the teachers was great… it was great having them, because they understand the curriculum. They know how to teach the curriculum. They know how to make modifications when it was necessary to do that. That was a huge help. And even then, you know, they were overwhelmed because of the timing. But I think that was a big plus too, having those experienced teachers in the classroom, who know how to work with the students and who know how to make changes when – when it was necessary to make changes. So, that was a big plus for me.

REPORTED CHALLENGES AND SUGGESTIONS

MOTIVATION AND ENGAGEMENT

Engaging and motivating students during the summer months was one of the most frequently mentioned challenges—even those who remarked about the power of the curriculum to engage students reported engagement as a challenge. Many staff noted the task was particularly difficult given the long days, and about half of staff interviewed suggested that shorter days and more weeks (three to four weeks, for example) might solve some of the problems with engagement. On other hand, a few staff thought that limiting the program for two weeks and holding it for long days increased student engagement. Students did not report that the days were too long, but a few suggested that the program be extended for a few more weeks to provide more time to complete business plans. A few others suggested that less time spent listening to lectures and more time on workshops and activities would improve the program.

I thought the two weeks worked fine. I thought that was actually good. I definitely wouldn’t make it any shorter but the intensity got people’s energy levels up I think and put a certain amount of urgency on it. I think it just becomes more incumbent on the teachers to be able to keep people’s attention and engage them during it.
A number of staff suggested the program could be strengthened by including more one-on-one support for students, either through additional staff or teaching assistants, more efficient use of teaching assistants’ time, or recruitment of additional volunteers or program alumni. Others suggested varying the typical session format of listening to a PowerPoint presentation of a skill and then applying it – for example, make the PowerPoint presentations more interactive, or include more and varied group work in addition to the usual partner work. One staff member suggested providing students with daily rubrics that would engage students in self-assessing their progress and keep them on track for completing the business plans. In contrast to this suggestion, a few students in the focus groups requested that the program be more open-ended, with less required adherence to the business plan templates or with more flexibility to go at their own pace.

**PLANNING TIME**

Some staff noted that the late implementation prevented program sites from having sufficient time to recruit teachers and students and thoroughly plan and prepare the curriculum, and to sort through NFTE materials and resources that could have supported more effective instruction. Some staff also reported that the lack of time resulted in fewer field trips, fewer guest speakers or fewer or less prepared volunteers than they would have preferred. In some cases, the lack of planning time for the summer also took away from the school-year program that spring.

Related to the lack of time for planning, student recruitment was one of the most salient challenges, and many sites had fewer students than they had originally planned. Because of the timing of the funding, sites had little time to recruit, and further, by the late spring, many students had already enrolled in other summer programs. A few staff reported that as a result of scrambling to find students, some students who were not particularly interested in entrepreneurship enrolled in the program and were not engaged.

Program staff suggested that more lead time to recruit students is crucial for program success. In addition, staff reported they had particular success recruiting students through organizational partners with similar missions who had existing relationships with students they were serving in other capacities—and that going through partner service organizations was a more effective strategy than reaching out to partner or prospective schools. Other program sites reported that most effective recruiting was conducted by the facilitators, who recruited students directly from the schools at which they taught during the school year.

**COMPREHENSION VS COMPLETION**

A commonly-voiced concern was the tension between comprehension and completion of the business plan, and the lack of time to gauge learning, assess, or reteach. Staff struggled in balancing the need to cover all the topics that students needed to be able to complete the business plan with the time that students needed to learn the content. Many staff felt that there
was too much content to cover in such a short amount of time. Some staff felt that longer programs (three to four weeks instead of two) would strengthen the program by allowing deeper coverage of topics. One staff member suggested lowering expectations for the business plan presentations, and for example, producing something similar to what younger students do during the school year *BizExpo*.

So, if we can’t change the amount of time or it’s not practical to change the amount of time and in my case it may not be because of the source providing the students then the outcome has to change because right now the outcome is totally unrealistic in the amount of time that we’re asking students to do it. It’s totally unrealistic.

As a result of the time pressure, staff noted that they sacrificed deeper comprehension, formative assessment and conceptual checkpoints for completion of the business plan and shallower levels of understanding for certain topics.

I mean, we were just finishing up financials this morning and that's always a challenge. So I think they're getting numbers, struggling with concepts. Like they can put the numbers in; I don't think they have a full understanding of what the numbers necessarily mean or how we calculated some of them and everything... just time to go through pretty dense material and actually make sure they get it... So I feel like, at times, I kind of gear towards like, ‘I’m going to dump a bunch of information on you, now go and do it,’ which isn’t how I would want to teach, but I’m just kind of—because of time constraints and because of the breadth of the material, I felt like it’s sort of what it had to be and certain points, which wasn’t an ideal.

…as we were like trying to keep the train rolling, it was like, ‘Alright. Here’s what marketing is. Here’s this example of how other people do marketing. And then, now go create your marketing plan,’ rather than like more conceptual checkpoints and stuff.

In addition to the time constraints on completing the business plan, a few staff and students felt that the business plan template and requirement constrained more experiential introductions to entrepreneurialism.

Similarly, while staff felt that the experiential learning activities were critical to program success, the time involved in conducting these activities took away from learning specific content and for completing business plans—in other words, some staff indicated that at least some of the field trips were not efficient in increasing student knowledge for completing the business plan. Preparing for and conducting the wholesale and selling events involved a lot of logistical planning and facilitator prep time. The wholesale and selling events consume the majority of three of the ten *BizCamp* instructional days, making them tempting sections of the curriculum to cut in the interest of saving time. Staff struggled to balance the importance of the life skills gained through interactions with business owners, guest speakers and volunteers with the need to cover content for the business plans.
Several staff also had recommendations for strengthening the materials and presentation of the business financial sheets, which many felt was one of the more difficult content areas to teach. Finally, a number of program staff indicated that students’ poor math skills posed a challenge in learning the curriculum content and in completing the business plans. Some suggested that the program next year build in more supports, for example, by using more coaches in the beginning of the program rather than towards the end or by providing a review at the beginning of the program.

FACILITATOR AND STAFF CONTENT KNOWLEDGE

As discussed above, delivery of the program and curriculum required significant expertise and knowledge of business topics. In some cases, facilitators and staff struggled with the content. To address the lack of deep content knowledge, a few staff suggested using mentors and volunteers to provide the missing expertise, while another staff member suggested providing more intensive training. One program site hired two instructors with deep expertise in discrete content that together would cover all content areas while another program site partnered with an outside organization that brought special expertise not held by the facilitators and staff.

Our teacher didn’t have a strong financial background and she wasn’t confident in teaching that. If I had known we could have brought in a TA or volunteers for that element.

The pool that we have, however, teachers need training on certain kinds of curriculum. What happened this year is... they only had to look over the curriculum for a two-hour curriculum meeting, and that's it. In two hours, you can't really effectively train a teacher on a really difficult, vigorous, entrepreneurial-oriented curriculum… A lot of things our students learn that they're learning at the graduate level. If you really want to make the teachers more effective, you need to have training for them for the start of summer curriculum. I think that that is kind of one way that you can kind of remedy that problem, but it's not really in our budget to have different local school training. I also think it would discourage teachers who want to be part of the program if they hear that they have to go through a longer training. I think that there's a host of problems, but yet that's definitely in my mind one of the biggest troubles with this program is the quality of our teachers. Because they end up just not teaching.

CONCLUSION AND RECOMMENDATIONS

Our results suggest that student experiences in the NFTE BizCamp and Startup Summer programs were beneficial and that the implementation of the programs promoted core NFTE principals.
Students were overwhelmingly positive in their assessment of the program, and reported valuing their experience in the program. Student and staff reports suggest that students learned more about starting and running a business, and that these concepts and skills would also support them in school and in future careers. In particular, both staff and students reported that students’ communication and problem-solving skills and confidence had improved, as had their knowledge of the importance of determination, persistence and flexibility.

Although students reported they were more prepared to start a business, they were not more likely to be interested in starting one. It may be that participation in the program served to clarify student career goals and interests. Furthermore, many students worried about the competing time demands of starting a business and going to school—and research suggests that working during the school year can have small positive impacts on academic outcomes, but that working for more than 20 hours per week negatively impacts these outcomes. Providing participants with specific information on the average time and money investments involved in starting different kinds of businesses could be useful.

Results from the EMI assessment suggest that students’ mean ratings of communication and problem-solving increased. Other constructs on the EMI assessment did not change. This finding is perhaps not surprising given that communication and problem-solving were practiced consistently throughout the two weeks, while less time was spent on other skills including risk-taking and opportunity recognition.

The lack of change on the other constructs on the EMI assessment may also be due to these characteristics being more difficult to influence, more difficult to measure, or were not of particular emphasis during the BizCamp. This finding requires further exploration. Moreover, student ratings of collaboration decreased on the EMI assessment. Although small, this change warrants more exploration, and possibly reflects the difficulties students faced in developing business plans collaboratively and the lack of specific structures to facilitate teamwork and leadership.

Results from content assessments suggest no change in student learning, on average. This may be reflective of the lack of incentive students faced in completing the assessments—and NFTE should consider tying assessment results to a small incentive, such as a gift card, for completion.

Alternatively, the challenge of requiring students to acquire an extensive amount of new content over such a short period of time may have hindered student learning. It may be unrealistic to expect deep student learning of all concepts over the course of two weeks.

The content assessment design might also be obfuscating measurement of student learning. In the future, the validity and reliability of the pre- and post-tests should be gauged to assess whether they are accurately measuring the specific skills identified
as impacts (communication, basic math, and networking). Questions on the pre- and post-tests may need to be differentiated so that students do not take the same assessment twice.

- Tracking participants over time could yield important information that could illuminate the long-term impacts of BizCamp participation. This information in turn could be useful to future program development.

Observations and interviews suggest that the implementation of the NFTE BizCamp and Startup Summer programs supported and promoted core NFTE principals. At the same time, results also point to some recommendations for improving the program.

- Lessons and activities were well organized and provided significant time for students to learn and practice skills essential for entrepreneurship, and youth were generally engaged and on-task during our observations.
  - However, during observations, opportunities for student leadership, and instances of teachers and peers pressing students to explain their reasoning tended to be superficial. Staff and facilitators should consider structuring more opportunities to ensure shared leadership, and structures to facilitate effective feedback, including coaching students on how to provide feedback, for example, by providing prompts or examples, and establishing early on a supportive classroom culture and conducting community building activities early in the program. Creating more interactive lectures rather than teacher-led might also be helpful.
  - Staff should also consider structures to facilitate small group interactions, given that during observations, small-group work was occasionally unstructured or dominated by one individual.
  - Finally, during many observations, student engagement tapered off at the end of the activity or lessons, usually because students were completing individual or partner work at different rates. Structures or practices to engage students who finish early would be beneficial.

- Program facilitators and staff felt prepared to deliver the program and had access to sufficient resources. Staff supporting the program brought considerable experience and backgrounds related to both business and instruction, and this experience was crucial in providing student with effective support. NFTE staff provided key logistical support for program sites, and NFTE templates for the business plan and power points and materials for the experiential activities provided essential support for instruction.
  - In the future NFTE should provide more lead time for planning. Preparations for the program were deeply hampered by the tight timeline, and resulted in problems with student recruitment and time wasted on administrative tasks and foreseeable contingencies. Advanced planning time should be dedicated for staff and facilitators to adapt the curriculum to local conditions and ensure activities involving other
organizations are coordinated with enough lead time. This includes enough planning time for the recruitment, screening and training of business volunteers.

- Facilitators who did not have prior NFTE experience found the training manual too dense to navigate and instead relied primarily on the agenda and prepared power-points and templates to plan and implement the program. Although the short-lead time may have necessitated these types of short cuts, NFTE should consider streamlining the training guide, and providing more training for inexperienced facilitators.

- Facilitators in large classes struggled to provide students with sufficient and high-quality one-on-one attention, and sole facilitators found it challenging to provide instruction every day across the two weeks. NFTE should consider limiting staff-student ratios and ensuring at least two instructors facilitate instruction (in the case of small program sites, instructors could alternate days, for example). Utilizing the time of the teaching assistants more effectively by involving them more deeply in instruction rather than administrative tasks would also support more effective delivery of the program.

- In some cases, facilitators lacked sufficient content knowledge to teach concepts. Staff should consider bringing in specialists to support areas where instructors lack mastery.

- The competition at the end of the program was a significant motivator for students, and program staff felt it was a key component to the program. Stipends also provided important motivation for students to participate (particularly given the appeal of a paid summer job for older students), and NFTE should ensure that all program sites provide students with at least a small stipend and access to transportation. Partnerships with city youth bureaus and city summer youth employment programs is one avenue to obtain funding for stipends.

- Volunteers also brought business expertise and provided essential feedback to students, particularly as students developed their business plans. Student reports suggest that interactions with mentors, guest speakers and volunteers were particularly powerful experience for students, whose main interactions with adults are likely with teachers in the school setting – meeting adults who often were not high achievers in school settings but had managed to find success through alternate routes was enlightening and inspiring.

- Organizational partnerships provided program sites with key resources, particularly in recruiting students and providing facilities. NFTE’s national office should consider ways to facilitate more of these kinds of local partnerships, particularly in sites where they are not present.

- A surprisingly high percentage of students had family members who were business owners. This possibly reflects the importance of role models in driving
entrepreneurial actions and self-selection into the program, as well as indirect evidence that many sites were able to recruit motivated students.

- BizCamp alumni could provide a resource for other BizCamp sites in the future, for example by serving as teaching assistants.

- Involving participants in future years could be a way to maintain the networks that students develop during their BizCamp experience and allow students to maintain and develop the social capital needed for successful entrepreneurship.

- The program objectives, activities, and measures of the program are clearly described through the NFTE curriculum and well-understood by the facilitators. Many staff felt that the program strengths lay in how it challenges students to meet high expectations and the student learning and growth that result. The business plan and competition provided students with a strong sense of accomplishment. Staff and facilitators overwhelmingly felt that the program curriculum was a good fit for students of all backgrounds, and adaptable to student needs and goals, and that the guest speakers, field trips and activities were essential in engaging and challenging students.

- However, differing emphases on program goals and content suggest that staff and facilitators do not have a shared understanding of the inflexible elements of the program and those that can be adapted to local needs.
  - Allowing for more rather than less leeway to adapt could provide an important avenue for experimentation and testing of new ideas to refine and adjust both school year and summer programs, if structures were in place to provide for sharing of best practices and feedback from staff and facilitators to program developers.
  - Some staff and facilitators questioned the rationale for some of the guidelines for implementation, such as whether the program should serve only students new to NFTE, and the two-week time limit. NFTE staff should revisit some of these guidelines and make rationale clear to local staff.

- In most cases, staff adapted the prescribed program by eliminating activities from the curriculum due to time constraints. NFTE should explore possible efficiencies for some of the activities, and the wholesale activity in particular—for example, buying wholesale goods online and selling for a few hours after the program session rather than during the day.

  - While staff agreed that most participants learned important foundational skills through the process of creating a business plan, many felt that involving participants in hands-on product development and real world business activities exposed students to a deeper understanding of the entrepreneurial process and mindset. For example, the process of product development, testing and failure in a real world, team-based, setting was described as stimulating reserves of motivation,
persistence, and aspiration harder to replicate in the classroom. More discussion and exploration among staff as to how to strike the right balance of activities is needed.

- Because of the limited time, staff and facilitators found it particularly challenging to both complete the business plans and ensure student comprehension of the concepts embedded within the plans. While facilitators reported covering all topics outlined, they chose content to emphasize and areas to skim, such that students gained superficial understanding of some content areas. It was not clear whether staff and facilitators focused on reaching a certain level of understanding for all topics, or selected to focus on student understanding in certain topics but not others, or dedicated the same amount of time to each topic, moving on regardless of student understanding.

  o Selecting and prioritizing which content to emphasize more uniformly – or eliminating a few presentations from the program could address some of these concerns. It also might make sense to de-emphasize these areas in the business plans and presentations. These priorities should be informed by both key content area for successful business plans, successful entrepreneurship, as well as the value-added content and concepts that NFTE uniquely provides, compared to a more traditional academic experiences. Student experiences a year or two later after the program, and feedback from successful and unsuccessful alumni might also shed light on the BizCamp preparation.

  o Some staff felt more time, such as an additional week, was needed to teach the concepts, although others felt two weeks was sufficient and that more time would lead to student disengagement. NFTE should consider testing this option in a few sites.

  o Providing additional individual support, through volunteers, alumni, teaching assistants or NFTE staff for students when focusing on concepts that are difficult to learn might also provide an efficient method to support student learning.
REFERENCES


APPENDICES

Appendix A – Methods of Data Collection

STUDENT SURVEYS

Two NFTE-designed surveys were administered online using the Survey Gizmo platform at the start and end of the program. The content assessment surveys were designed to measure student comprehension of key business-related content and skills aligned to the core topics of the program: opportunity recognition and business structure, market research, financial information and operations and marketing and sales. The pre-assessment consisted of 16 multiple-choice questions. The post-content assessment included the same 16 questions plus an additional eleven questions that are usually included in the school year assessment. The addition of these 11 questions will allow for comparisons between the summer and school year. In order to measure change over time, we focus on comparing student scores on only the 16 questions in the pre- and post-assessments.

NFTE staff also administered an assessment designed to measure students’ entrepreneurial mindsets (EMI), including students’ knowledge, confidence, values, behavior and attitudes related to problem solving, comfort with risk, orientation towards the future, communication, collaboration, opportunity recognition, self-efficacy and initiative, and flexibility and adaptability. NFTE research staff compiled the assessment using individual question items primarily from pre-existing surveys, although NFTE identified the sets of items that represented their hypothesized entrepreneurial mindset constructs. The post-entrepreneurial-mindset assessment also included questions about perceptions of the program implementation and value.

Program staff directed students to complete the assessments in the classroom. NFTE staff requested that program staff administer the assessments on the first and last days of each program, and in all program sites students completed pre-assessments on the first or second day of the program, and post-assessments on the last day of the program. In one site, students completed the pre-assessments prior to attending.

To enable matching of surveys across time, the diagnostic and summative content assessments asked students to use an identification code when completing the assessments. A total of 193 students responded to both the pre- and post-content-assessment, and of these students, 182 fully completed both assessments. However, to encourage students to feel free to answer questions about their perceptions of the program with honesty and to avoid social desirability response bias, students completed the entrepreneurial mindset assessments anonymously. A NFTE research staff member matched pre-entrepreneurial mindset assessments to post-assessments for 184 students. Because the mindset assessments were anonymous,

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2 The identification code consisted of a non-identifying key comprised of the first three digits of the student’s home address, the first four letters of his or her mother or guardian’s first name, and the last two digits of his or her cell phone.
researchers could not match the content assessments to the entrepreneurial mindset assessments.

**Survey Sample.** Table A1 displays the number of assessment respondents by geographic location, and the percent that each program site comprises of the total respondents. Entrepreneurial Mindset Assessment respondents are broadly representative of the various BizCamp sites, and students from all sites but the Bay Area and Newark completed both assessments. However, there are particularly low response rates from Los Angeles, Washington DC and New York City program sites on both assessments, and the content assessment does not include respondents from the Suburban New York, Bowie State, Newark or Bay Area program sites. Thus, results from this assessment may be non-representative of the BizCamp population.

**Table A1. Survey Response Rate by Site**

<table>
<thead>
<tr>
<th>Program Site</th>
<th>Matched entrepreneurial mindset assessment respondents</th>
<th>Content assessment respondents, matched and completed</th>
</tr>
</thead>
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<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Baltimore (2 sites)</td>
<td>25</td>
<td>71.4</td>
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<tr>
<td>Bay Area Girls Empowerment</td>
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<td>0.0</td>
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<tr>
<td>Bridgeport, CT (2 sites)</td>
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<td>Chicago</td>
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<td>42.9</td>
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<td>Suburban New York/Westchester</td>
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**QUALITATIVE STUDY DATA COLLECTION**

In order to document program implementation and explore the factors that helped or hindered implementation we selected a sample of six program sites at which to conduct in-depth research on implementation: New York City (Girls Empowerment and Startup Summer), Suburban New York/Westchester, Chicago, Newark and Los Angeles (Startup Summer). In collaboration with NFTE staff, we have selected sites to ensure diversity in geography and program features likely important for successful implementation. Specifically, our sample includes sites from the East Coast, Mid-West and West Coast, large and small cities and suburban areas, newly- and long-established sites, and a mix of programs, including the regular BizCamp, Startup Summer
BizCamps and Girls Empowerment BizCamps. We also include sites that differ in the number of weeks of participation and number of participants.³

We conducted two- to three-day visits to the program sites in our sample. We conducted the visit towards the end of the program (during the beginning or middle of the second week) to ensure that staff and participants have sufficient experience from which to provide useful feedback. In addition, we visited a few sites during the first week to obtain perspectives on the implementation in the beginning of the program. During site visits, we conducted observations, interviews and focus groups with local NFTE staff, BizCamp facilitators, business volunteers and students.

Observations. We used classroom and program activity observations to develop a deeper picture of student experiences in the program. Research suggests that while instructor self-reports tend to be accurate regarding how often strategies are used or content of focus, they tend to provide a less accurate picture of instructional quality. The observations focused on measuring the content of the delivered curriculum and to the extent to which it aligns to core NFTE topics related to entrepreneurship, the classroom culture, and practices that research suggests are central for supporting student learning and development such as the level of cognitive demand, student engagement, classroom discourse and student teaming and collaboration.

We conducted observations of a sample of daily activities over the course of two to three days in each program site using an observation rubric to guide data collection. The observation rubric is designed to capture instructional content and processes as well as the unique elements that an out-of-school time program provides youth, such as a supportive environment, the opportunity to build relationships with adults who are not teachers and the advantages of an environment where students might have more independence than in a traditional school setting. Specifically, we include a series of items to measure the nature and quality of participants’ relationships with their peers and with other adults in the program, participants’ engagement and opportunities for leadership and collaboration, and the overall culture. These items are adapted from the Out-of-School-Time observation protocol (OST-OP; Pechman, Mielke, Russell, White, & Cooc, 2008), one of the most widely-used observation protocols for after school programs, and one that has evidence of validity and is predictive of student learning (Leos-Urbel, 2013). Second, the observation protocol includes a series of items designed to measure the academic aspects of the program and the instruction that students experience, focusing on content and skills related to entrepreneurship. This second section is based partially on previously-developed and widely-used observation rubrics designed to measure mathematics and science instruction, including the Reformed Teaching Observation Protocol (RTOP) developed by researchers at the Evaluation Facilitation Group of the Arizona Collaborative for Excellence in the Preparation of Teachers (Sawada & Piburn, 2000) and

³ We had to alter fieldwork slightly at one site. Following a series of flight cancellations due to inclement weather and airline obstacles, we were unable to reschedule our site visit to Los Angeles Startup Summer within time to observe the boot camp, therefore, we conducted interviews with staff and students via webcam, and did not conduct observations at this site.
UTeach Observation Protocol (UTOP, an adapted version of the RTOP; Walkington et al., 2011). These observation protocols are widely used, and further, some evidence suggests that the OST-OP and UTOP are predictive of student learning (Leos-Urbel, 2013; Kane & Staiger, 2012) and thus may provide indicators of the extent to which the program supports the development of the skills and knowledge critical for school and ultimately successful participation in the workforce.

We combined and adapted the three observation protocols to focus on student experience in the program (rather than the instructor) and to focus on content and skills related to entrepreneurship, particularly related to opportunities for student creativity, initiative and leadership, problem solving, critical thinking and argumentation, collaboration and communication. We also incorporated items regarding the baseline elements for learning, such as student engagement, organization and access to resources, and whether the content is accurate, developmentally appropriate and addresses an important topic.

We conducted 29 observations across the five sites visited, and of these, eight joint observations took place on site visits. In other words, a total 21 discrete activities were observed and coded by one or two observers, for an average of four observations per site. For activities that were jointly observed, we reported the average (mean) rating for each category on the observation rubric.

**Interviews.** We conducted interviews with NFTE staff who are supporting the *BizCamp* on-site and *BizCamp* facilitators to shed light on program implementation and adaptations, challenges, successes and innovations, and important resources and other factors affecting implementation. Interviews with NFTE staff and *BizCamp* facilitators focused on how prepared facilitators are to implement the program, such as staff experience and backgrounds, availability of materials and the training and support from NFTE, as well as questions regarding implementation of the program, such as student recruitment, goals, focus of instruction, and core activities. Staff interviews also explored adaptations to the curriculum and rationale, the challenges to implementing the program with fidelity and perceptions of impact on students. Additionally, we interviewed *BizCamp* business volunteers regarding their perceptions of the program, challenges and suggestions.

**Student Focus Groups.** We conducted focus groups with five to eight students at each of the sample sites to gather information about their experiences in and views of the value of the various elements of the program, program climate and interactions with program staff and peers. We also investigated the types of activities students have participated in during the summer and the extent to which *BizCamp* provides students with an experience not otherwise available to the students.
Table A2. Site Visit Interviews

<table>
<thead>
<tr>
<th>Location</th>
<th>NFTE Staff</th>
<th>Program Facilitators</th>
<th>Students</th>
<th>Volunteers/other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>New York City Startup Summer</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>New York City Girls Empowerment</td>
<td>*</td>
<td>NA</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Suburban New York/Westchester</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Newark</td>
<td>1</td>
<td>NA</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Greater Los Angeles Startup Summer</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>8</strong></td>
<td><strong>4</strong></td>
<td><strong>38</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

*The same NFTE staff support both New York City Girls Empowerment BizCamp and Newark BizCamp.

**Phone Interviews with Staff and Facilitators.** In order to obtain a broad picture of the implementation of *BizCamps* across the US, we also conducted phone interviews with NFTE staff and facilitators who supported *BizCamps* that we did not visit (see Table A3). We interviewed these staff following the conclusion of the *BizCamps*.

Table A3. Phone Interviews

<table>
<thead>
<tr>
<th>Location</th>
<th>NFTE Staff</th>
<th>Program Facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltimore</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bay Area</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bridgeport</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Greater Los Angeles <em>BizCamp</em></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>North Texas-Irving</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>North Texas-Dallas</td>
<td>*</td>
<td>2</td>
</tr>
<tr>
<td>South Florida</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Washington DC</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

*The same NFTE staff support both Texas *BizCamps*. 
## Appendix B - EMI constructs and defining characteristics

### Table B1. EMI constructs and defining characteristics

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>DEFINING CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical thinking and problem solving</td>
<td>Analyze and evaluate different points of view</td>
</tr>
<tr>
<td></td>
<td>Synthesize information and arguments from a variety of sources</td>
</tr>
<tr>
<td></td>
<td>Interpret information and draw conclusions</td>
</tr>
<tr>
<td>Opportunity recognition</td>
<td>Identify problems as opportunities</td>
</tr>
<tr>
<td></td>
<td>Understand when there is a “window of opportunity”</td>
</tr>
<tr>
<td></td>
<td>Assess business ideas to identify opportunities</td>
</tr>
<tr>
<td>Risk</td>
<td>Understand the difference between risk and reward</td>
</tr>
<tr>
<td></td>
<td>Learn how to calculate risk</td>
</tr>
<tr>
<td></td>
<td>Differentiate between short-term and long-term risks</td>
</tr>
<tr>
<td></td>
<td>Push personal limits to achieve a desired goal</td>
</tr>
<tr>
<td>Flexibility &amp; Adaptability</td>
<td>Understand how to incorporate feedback effectively</td>
</tr>
<tr>
<td></td>
<td>Reflect critically on learning experiences and processes</td>
</tr>
<tr>
<td></td>
<td>React positively to unexpected occurrences</td>
</tr>
<tr>
<td>Orientation towards failure</td>
<td>View failure as an opportunity to learn</td>
</tr>
<tr>
<td></td>
<td>Remain optimistic in the face of setbacks</td>
</tr>
<tr>
<td>Communication</td>
<td>Articulate thoughts and ideas effectively to individuals and groups</td>
</tr>
<tr>
<td></td>
<td>Network confidently with professional connections</td>
</tr>
<tr>
<td></td>
<td>Express confidence in public speaking</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Work effectively in groups</td>
</tr>
<tr>
<td></td>
<td>Respect team members and alternative points of view</td>
</tr>
<tr>
<td>Future orientation and locus of control</td>
<td>Prioritize long term success in the face of short term sacrifice/work</td>
</tr>
<tr>
<td></td>
<td>See beyond immediate timeframe and plan for a longer time horizon</td>
</tr>
<tr>
<td></td>
<td>View the future as dependent on personal actions</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>Set goals and establish action plans to accomplish them</td>
</tr>
<tr>
<td></td>
<td>Manage time effectively</td>
</tr>
<tr>
<td></td>
<td>Believe in personal capacity to accomplish challenging tasks</td>
</tr>
</tbody>
</table>
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