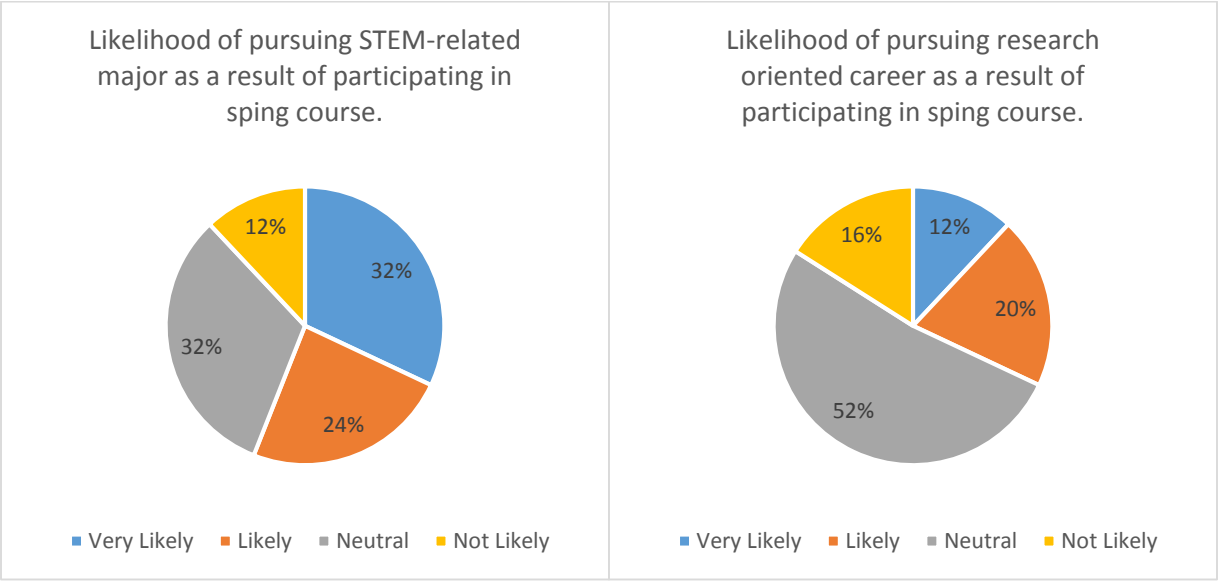
2021 Cohort Career Readiness Report

The Baruch College Now STEM Research Academy is designed to provide NYC public high school students with an opportunity to build their science knowledge and skills by engaging in 'authentic inquiry' activities. Using a two-semester (spring and summer) program model, selected students are enrolled in a college-credit research methods course during the spring to strengthen necessary skills, such as formulating a strong research question, designing testable experiments, performing literature searches, and reading scientific literature. Upon successfully completing the spring course, interested students are matched with a CUNY research faculty member and participate in a structured six-week summer research experience.

Spring 2021 Career Readiness Data: *The following data are for students who successfully completed the spring research preparatory course (N=25).*

Average Career Maturity Scores (*CMI – Form C*)

	Concern	Curiosity	Confidence	Consultation	Career Choice Readiness
Pre-Test (beginning of spring semester)	4.96	3.04	3	3.6	10.92
Post-Test (end of spring semester)	5.04	3.2	2.8	3.8	10.96
Mean Difference (beginning & end of spring semester)	**0.08**	**0.16**	**0.2**	**0.2**	**0.04**



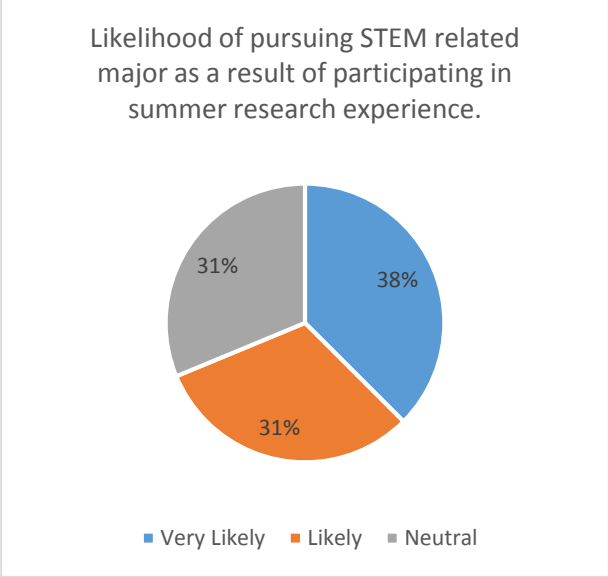
As a result of participating in our spring research preparatory course, students saw in a slight mean increase in their attitudes towards making career decisions (career concern) and seeking information on occupations (career curiosity). Additionally, the majority of students (55%)

indicated that they were more likely to pursue a STEM-related major as a result of participating in the spring course. Conversely, less than half (32%) indicated that they were more likely to pursue a research oriented career as a result of participating in the spring course.

Summer 2021 Career Readiness Data: *The following data are for students who successfully completed the spring research preparatory course and summer research experience (n=16).*

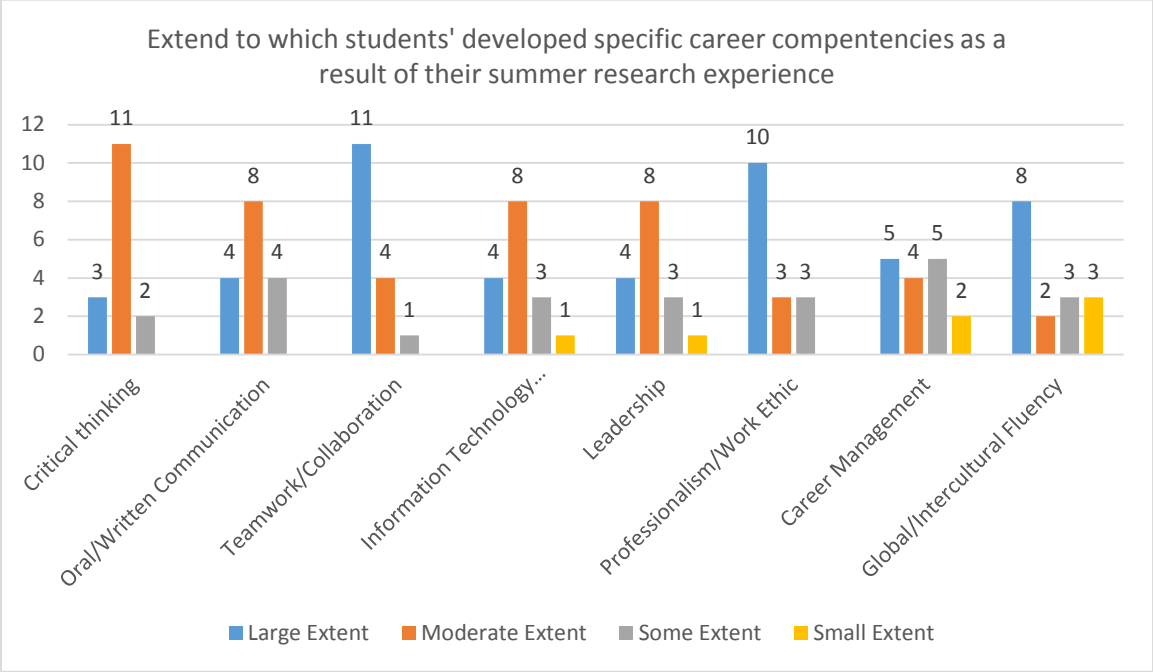
Average Career Maturity Scores (*CMI – Form C*)

	Concern	Curiosity	Confidence	Consultation	Career Choice Readiness
Pre-Test (beginning of spring semester)	5.06	2.88	2.63	3.88	10.56
Post-Test (end of spring semester/beginning of summer)	5.38	3.25	2.69	3.94	11.38
Mean Difference (beginning & end of spring semester)	**0.32**	**0.37**	**0.06**	**0.06**	**0.82**
Post-Test (end of summer semester)	5.25	3.77	3.25	3.437	12.25
Mean Difference (beginning & end of summer semester)	**0.13**	**0.52**	**0.56**	**0.5**	**0.87**
Mean Difference (beginning of spring & end of summer semester)	**0.19**	**0.89**	**0.62**	**0.44**	**1.69**



As a result of participating in our spring research preparatory course, students who completed the entire program (STEM scholars) saw a slight increase in all dimensions of the Career Maturity Inventory - CMI (career concern, career curiosity, career confidence, consultation, and overall career choice readiness). Slight mean increases in STEM scholars' attitudes towards exploring the world of work (career curiosity), their ability to make wise career decisions (career confidence),

and their degree of adaptability in career decision making and readiness to make occupational choices (career choice readiness) were also observed post-summer research experience compared to post-spring course. Overall, moderate mean increases were observed across CMI dimensions when comparing pre-spring course and post-summer research experience. Additionally, the majority of STEM scholars (69%) indicated that they were more likely to pursue a STEM-related major as a result of participating in the summer research experience as well as pursue a research oriented career (75%).



When asked which career competencies students felt they developed as part of the summer research experience, the majority of STEM scholars indicated developing the competencies listed to large/moderate extent: Critical Thinking/Problem Solving (87.5%); Oral/Written Communications (75%); Teamwork/Collaboration (93.75%); Digital Technology (75%); Leadership (75%); Professionalism/Work Ethic (81.25%); Career Management (56.25%); Global/Intercultural Fluency (62.5%).

About the Career Maturity Inventory (CMI – Form C)

The CMI-Form C is a 24-item scale that measures change along four scales of student career awareness and planning (Savickas & Porfelti, 2011). The primary use of the CMI is to measure a person's attitudes and competencies in making realistic career choices (the CMI does not measure a person's ability to make said choices). The dimensions assessed by the CMI are listed below,

- Career Concern: Measures extent to which an individual is oriented to and involved in the process of making career decisions.
- Career Curiosity: Measures extent to which an individual is exploring the world of work and seeking information about occupations and their requirements.
- Career Confidence: Measures extent to which an individual has faith in their ability to make wise career decisions and realistic occupation choices.
- Consultation: Measures extent to which an individual seeks assistance in career decision making by requesting information or advice from others.

- Career Choice Readiness (Concern + Curiosity + Confidence): Measures an individual's degree of adaptability in career decision making and readiness to make occupational choices.

About the National Association of College and Employers (NACE)'s Career Readiness Competencies

Career readiness is a foundation from which to demonstrate requisite core competencies that broadly prepare the college educated for success in the workplace and lifelong career management. There are eight career readiness competencies, which were identified by NACE, each of which can be demonstrated in a variety of ways.

1. Critical Thinking/Problem Solving: Exercise sound reasoning to analyze issues, make decisions, and overcome problems. The individual is able to obtain, interpret, and use knowledge, facts, and data in this process, and may demonstrate originality and inventiveness.
2. Oral/Written Communications: Articulate thoughts and ideas clearly and effectively in written and oral forms to persons inside and outside of the organization. The individual has public speaking skills; is able to express ideas to others; and can write/edit memos, letters, and complex technical reports clearly and effectively.
3. Teamwork/Collaboration: Build collaborative relationships with colleagues and customers representing diverse cultures, races, ages, genders, religions, lifestyles, and viewpoints. The individual is able to work within a team structure, and can negotiate and manage conflict.
4. Digital Technology: Leverage existing digital technologies ethically and efficiently to solve problems, complete tasks, and accomplish goals. The individual demonstrates effective adaptability to new and emerging technologies.
5. Leadership: Leverage the strengths of others to achieve common goals, and use interpersonal skills to coach and develop others. The individual is able to assess and manage his/her emotions and those of others; use empathetic skills to guide and motivate; and organize, prioritize, and delegate work.
6. Professionalism/Work Ethic: Demonstrate personal accountability and effective work habits, e.g., punctuality, working productively with others, and time workload management, and understand the impact of non-verbal communication on professional work image. The individual demonstrates integrity and ethical behavior, acts responsibly with the interests of the larger community in mind, and is able to learn from his/her mistakes.
7. Career Management: Identify and articulate one's skills, strengths, knowledge, and experiences relevant to the position desired and career goals, and identify areas necessary for professional growth. The individual is able to navigate and explore job options, understands and can take the steps necessary to pursue opportunities, and understands how to self-advocate for opportunities in the workplace.
8. Global/Intercultural Fluency: Value, respect, and learn from diverse cultures, races, ages, genders, sexual orientations, and religions. The individual demonstrates, openness, inclusiveness, sensitivity, and the ability to interact respectfully with all people and understand individuals' differences.