# ROPES: Rowan University's Opportunity for Postsecondary Excellence and Success

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**Rowan University's Opportunity for Postsecondary Excellence and Success (ROPES): Mitigating and Expanding Students' Learning Opportunities**

**Abstract**
R.O.P.E.S. is a dual enrollment initiative that was funded by the U.S. Department of Education and aligned with the New Jersey Governor's Emergency Education Relief Fund II and the CRRSA Act. It aimed to create pathways to college for high school juniors in South Jersey, focusing on five select fields that included teacher education, music business, social services, computer science and engineering. The program exposed students to five career pathways, employed targeted strategies to support underrepresented communities, and integrated social and emotional learning. This paper showcases the program's objectives, student participation, impact on South Jersey students, and their chosen fields of study. The program supported one hundred high school juniors in rural and urban school districts across South Jersey. A 70% student retention was obtained for the cohort with all pursuing a 2-year or 4-year college education. Twenty-eight students are currently attending Rowan University while the rest are at a 2- or 4- year college. Programs like ROPES could revolutionize students' lives, foster diversity in the future workforce, and establish a more inclusive and equitable educational landscape.

**Introduction**
The transition to remote learning during the COVID-19 pandemic has presented significant hurdles for K-12 students. Extended periods of online education have led to a host of challenges, including increased rates of depression, anxiety, and learning setbacks, impacting students, parents, and educators alike. Disadvantaged students, including those from low-income families, English language learners, and students with disabilities, have faced additional obstacles due to limited access to technology, financial resources, and parental support, exacerbating existing educational disparities (Hanushek & Woessmann, 2020).

The University's ROPES (Rowan Opportunity for Postsecondary Excellence and Success) program was designed to address these issues. ROPES aims to establish clear pathways to college for high school juniors in rural and urban school districts across South Jersey, facilitating a seamless transition and successful enrollment in postsecondary education. The program recognizes the need for interventions to accelerate learning and mitigate the pandemic's impact on students' educational journeys (Schleicher, 2020; Hanushek & Woessmann, 2020). Apart from existing initiatives, ROPES leverages collaboration with five colleges at Rowan University: College of Education, College of Humanities and Social Sciences, College of Science and Mathematics, Henry M. Rowan College of Engineering, and College of Performing Arts. The program offered specific fields of study, within each of these colleges. Additionally, two career exploration courses were developed to expose students to these disciplines and actively engage them.

The implementation of ROPES commenced with recruiting one hundred high school juniors from partner schools, who embarked on a dual enrollment program. The program adopted a holistic approach, combining interactive activities to foster a college-bound mindset while enabling students to earn high school and college credits. Throughout their participation, students received comprehensive support services, encompassing academic advising, tutoring, and social support. ROPES outlined several vital objectives, including promoting student success and enhancing workforce readiness, engaging students in experiential activities, providing customizable career

exploration plans, and integrating social and emotional learning strategies.

The program closely aligns with Rowan University's commitment to accessibility, affordability, and the state plan's emphasis on early exposure to college, experiential learning, and supportive faculty and staff. By participating in ROPES, students were able to explore diverse career paths, empowering them to make informed decisions about their future education and professional trajectories. The program emphasized fostering equity, supporting underrepresented student populations, ensuring they reach their full potential, and mitigating the educational disparities amplified by the pandemic. Rowan University's vision extends beyond education; it aims to diversify the future workforce in South Jersey and beyond. Through early exposure to college and comprehensive support, ROPES intended to equip high school students with the necessary tools for academic success and future career opportunities. The program's interdisciplinary approach and evidence-based acceleration strategies align with research indicating the positive impact of dual enrollment programs on high school completion, college enrollment, and academic motivation (Brian, 2016). Through collaboration with urban and rural school districts in South Jersey, ROPES represents a transformative initiative that directly addressed the challenges faced by disadvantaged students, providing them with equitable pathways and opportunities for success. This paper delves deeper into the implementation and outcomes of the ROPES program, shedding light on effective strategies for empowering and supporting P-12 students as they embark on their postsecondary education journeys.

### Project
The proposed dual enrollment program aimed to create a comprehensive curriculum that combined academic learning with college and career readiness, explicitly targeting low-income, first-generation, and underrepresented students. The program aimed to provide access and support to these students while promoting opportunities for their success and enhanced workforce readiness. By exposing students to five diverse career pathways through academic and hands-on experiences, the program sought to ignite their interest in pursuing post-secondary education. The program integrated high-quality instructional materials to facilitate effective learning and employed best-practice approaches, personalized instruction, and blended learning techniques. Despite the unprecedented challenges faced by this generation of students due to the pandemic, the ROPES program aimed to bridge the gap and provide a transformative educational experience for those left behind.

### Objectives
The four major objectives of the ROPES initiative are provided below:

1. Promote opportunities for student success and enhanced workforce readiness in career fields such as teacher education, engineering, social services, computer science, and music business. This goal aligned with the institution's focus on preparing students for in-demand careers and equipping them with the necessary skills.

2. Engage students in experiential activities, fostered relationships with Rowan faculty and staff and connected them with student success services. This objective aligned with the state plan's emphasis on experiential learning and the importance of supportive relationships in students' academic journeys.

3. Provide customizable plans and tools for career exploration, ensuring equity and

opportunities for low-income students in rural and urban school districts. This goal directly addressed the state plan's focus on equity and access to higher education for underserved populations.

4. Integrate social and emotional learning strategies to improve educational experiences and ease students' transition to college. This objective aligned with the State Plan's emphasis on holistic student development and creating a supportive learning environment.

**Implementation**

The proposed project plan for the ROPES program was implemented following a structured timeline and transparent allocation of responsibilities. The implementation process ensured the effective execution of the outlined activities within the grant cycle. The project activities were aligned with the budget proposed, enabling the efficient utilization of resources to achieve the desired outcomes.

To begin, the Office of Admissions and Outreach along with the faculty participating in the program were responsible for recruiting selected students from partner schools to participate in the ROPES program. This involved targeted outreach efforts and communication with the schools to identify eligible students. The recruitment process took place in the fall of 2021. Recruitment presentations were made to high school guidance counselors, school administrators, prospective students and the parents/guardians. Students were guided through the online application process. A committee was tasked with the selection of one hundred students. The initial data for the selected students is provided below in terms of specialization, gender, ethnicity.
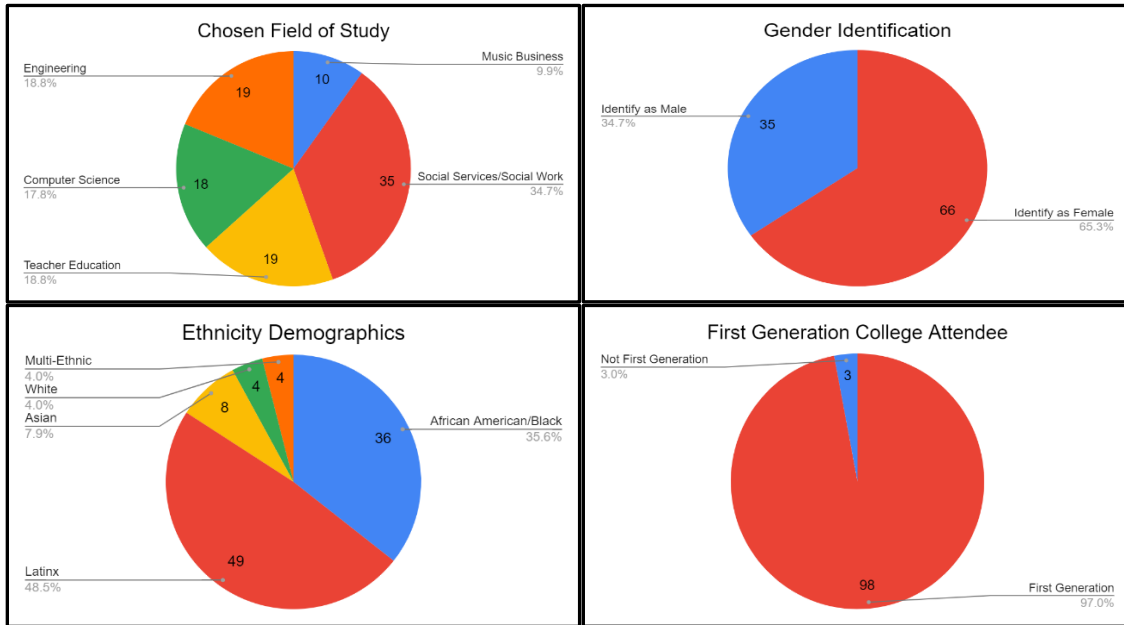


**Figure 1: ROPES participant information at start of program**

The data indicates that Social Services garnered the most interest and 98% of the students were first generation. Applicants had to submit two letters of recommendation from high school teachers for their field of study, a personal essay as to why they want to participate in the

program and provide their transcripts. Students who selected engineering and computer science were asked to indicate all the math and science courses they had taken.

Upon enrollment, the students commenced their ROPES journey in the 2021 fall semester. All courses for ROPES students were offered online and their sections were separate than the university students. They enrolled in the one-credit Introduction to Career Pathways course the Office of Student Success facilitated. This course introduced students to various career options, instilled a college-bound disposition, and focused on skill development. Faculty from relevant disciplines also participated by presenting on the particular specializations available for selection.

In the subsequent spring semester 2022, ROPES students undertook the three-credit online course, College Composition I (COMP I), delivered by the Office of Online Learning. The one-credit Career Pathways Preparation course was also offered to enhance students' oral and written communication skills, presentation abilities, and computer literacy. The Office of Student Success supported this course. During this semester, participants attended a one-day campus session in-person to visit various colleges, work on activities relevant to their specialization and get exposure on college applications and financial aid.

During the summer of 2022, the ROPES Summer Institute (RSI) was conducted, providing career exploration and community-building opportunities. Students were provided transportation to Rowan University. The Office of Student Affairs and Career Advancement collaborated to organize the RSI activities, including exposure to college life, interactions with faculty and staff, and engagement with campus resources. The RSI culminated with a showcase presentation and a closing ceremony, where certificates of completion were awarded. The Office of Student Affairs oversaw the event planning and logistics. ROPES students engaged in their academic discipline coursework from the fall of 2022 through the spring of 2023. The specific courses, tailored to each student's chosen field of interest, were taught by faculty members from the respective colleges at Rowan University. The Office of Academic Affairs, in collaboration with the participating colleges, ensured the smooth delivery and support of these courses. The course offerings from each specialization area are presented below:

**Table 1: Discipline Specific Course Offerings**

| General Education Courses | |
|---|---|
| College Composition I | Introduction to Career Pathways & Preparation |
| **Teacher Education** | |
| History of American Education | Characteristics of Knowledge and Acquisition |
| **Computer Science** | |
| Introduction to Scientific Programming | Introduction to Object Oriented Programming/Computer Science and Programming |
| **Engineering** | |
| Introduction to Engineering Fundamentals 1 | Introduction to Engineering Fundamentals 2 |

| Music | |
|---|---|
| History of Popular Music | Hip Hop Culture |
| **Social Welfare** | |
| American Government | Social Sciences-Social Problems |

The courses offered by the computer science and engineering departments were the regular courses offered to college students. The course content matched the catalog descriptions available on the relevant department website. Regular faculty taught these courses and were paid at their overload rate for the credits taught. The demographics of the computer science and engineering students is provided below in Table 2:

**Table 2: Student Demographics of Incoming Computer Science and Engineering Majors**

| Computer Science | Engineering |
|---|---|
| Total 18　　(10 Male 8 Female)<br>5 Asian<br>1 Black<br>1 White<br>11 Latina/Hispanic | Total 19　　(9 Male 10 Female)<br>3 Asian<br>8 Black<br>2 White<br>5 Latina/Hispanic<br>1Multi Ethnic |

As part of the implementation process, the Office of Admissions and Financial Aid evaluated the completed ROPES courses for transfer credits for students applying to Rowan University in 2023. Application fees and enrollment deposit fees were waived for RSI students accepted into Rowan University. This was facilitated by the Office of Admissions and the Office of Financial Aid. The accepted RSI students could attend a special reunion event during the summer 2023 first-year student orientation. The Office of Student Affairs and the Office of Alumni Engagement collaborated to organize this event, fostering community and connection among the ROPES students.

Overall, implementing the ROPES program involved multiple offices and departments at Rowan University, each assigned specific responsibilities to ensure the successful execution of the project activities. By following the proposed timeline and leveraging the allocated budget, the institution aimed to effectively implement the program and achieve the desired outcomes for the participating students.

**Results**

The ROPES program's goals aligned with Rowan University's institutional goals and the state plan for Higher Education. The project addressed the needs of students who required "ramp-up" opportunities to accelerate their learning, considering the challenges posed by the pandemic. Rowan University has a track record of collaborating with local school districts in economically distressed areas to expand dual enrollment opportunities, demonstrating a commitment to access and affordability. By offering strategies tailored to students in Black, Latinx, and Indigenous

communities, the program aimed to help them reach their full potential. High school students participating in the program could simultaneously earn high school and college credits, ensuring continuity of learning. Additionally, they benefited from various support services, including advising, tutoring, and social support. Implementing Rowan's Opportunity for Postsecondary Excellence and Success (ROPES) program yielded significant results and outcomes.

The following section outlines the anticipated results of the ROPES program:

1. Increased College Access: Through the ROPES program, a cohort of one hundred high school juniors from partner schools in South Jersey could participate in a comprehensive dual enrollment program. These students earned nine to eleven dual-enrollment high school and college credits, giving them a head start on their postsecondary education journey.

2. Enhanced Academic and Career Readiness: ROPES aimed to promote opportunities for student success and enhanced workforce readiness by exposing students to five broad career pathways: teacher education, social services, computer science, engineering, and music business. Students developed the necessary knowledge, skills, and dispositions to thrive in their chosen fields by engaging in academic coursework, experiential activities, and career exploration.

3. Improved Transition to College: The ROPES program incorporated social and emotional learning strategies to support students' transition to college. By integrating these strategies throughout the program, ROPES aimed to improve students' educational experiences, enhance their resilience, and ease the challenges associated with the college transition process. This support contributed to increased student retention and persistence in postsecondary education.

4. Equity and Inclusion: One of the primary goals of the ROPES program was to provide equitable opportunities for low-income, first-generation, and underrepresented students. By focusing on students in Black, Latinx, and Indigenous communities, ROPES sought to address educational disparities and empower these students to achieve their full potential. The program's strategies, resources, and support services were specifically tailored to meet the unique needs of these student populations.

5. Academic Motivation and Engagement: Research has shown that participation in dual enrollment programs increases students' academic motivation and engagement. By offering early exposure to college-level coursework and experiential learning opportunities, ROPES ignited students' passion for learning and strengthened their commitment to pursuing postsecondary education. The program's hands-on approach and interaction with Rowan faculty and peer mentors/tutors fostered a sense of belonging and personal investment in their academic and career goals.

6. Long-Term Impact: The impact of the ROPES program extended beyond the immediate academic year. Students who completed the program and applied to Rowan University for admission in 2023 had their completed courses evaluated for transfer credits, with their application fee waived and enrollment deposit fee covered. ROPES students accepted to Rowan University also qualified for scholarships and attended a special reunion event during the summer of 2023 first-year student orientation. These incentives provided long-term benefits for program

participants, further encouraging their pursuit of higher education.

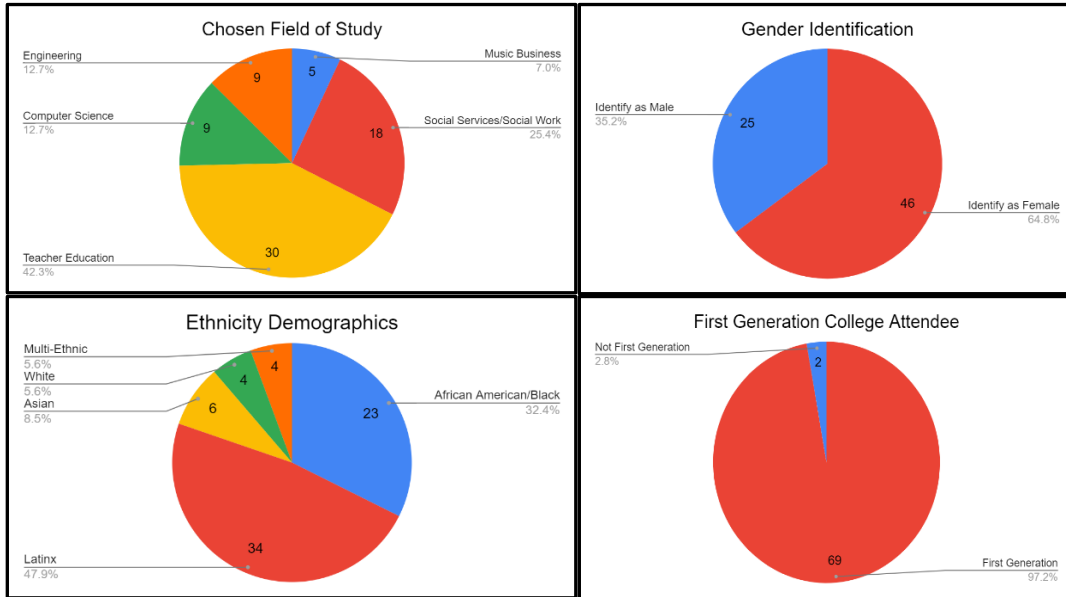The student data at the end of the program is presented below:



**Figure 2: ROPES participant information at end of program**

As evident from the start and final data, the greatest attrition occurred in Engineering and Computer Science disciplines (around 50%). This occurred for a variety of reasons that include:

- lack of preparation for the Introduction to Engineering courses,

- conflict with demands of athletic programs with class time,

- demands of outside work for financial needs

- meeting the rigor of high school classes along with the dual credit courses

- conflicts with student clubs and sports activities

Some school districts did a better of scheduling their courses so that students could attend classes without missing other commitments. The online mode of teaching was not easy for both engineering and computer science. Student feedback indicated that they did not understand the level of commitment required by the program.

A total of 29 students from the 70 are pursuing various majors at Rowan University. The rest are at a 2-year or 4- year college, with three pursuing specialized training in welding, medical assistant and EMT. The breakdown of the final participants and their majors at Rowan University are listed below in Table 2. Table 3 shows majors pursued at other institutions.

**Table 2: ROPES Participants by Major at Rowan University by College**

| | |
|---|---|
| College of Education | 5 |
| College of Engineering <br> *(1 in Electrical & Computer Engineering)* | 1 |
| College of Humanities & Social Services <br> *(3 in Law & Justice)* | 5 |
| College of Science & Math <br> *(6 in Computer Science)* | 11 |
| College of Performing Arts | 0 |
| College of Business* | 2 |
| School of Earth & Environment* | 2 |
| University Advising Center* | 3 |

***\*Did not participate in ROPES***

**Table 3: Non-Rowan Students with Their Major of Choice at Other Institutions**

| |
|---|
| Biological Science |
| Biology |
| Computer Science |
| Economics |
| Engineering |
| Exploratory Studies |
| Fine Arts |
| Law & Justice |
| Mathematics |
| Nursing |
| Nutrition and Food Science |
| Pre-Med |
| Radio/TV/Film |
| Social Work |
| Sports Communications & Media |
| Teacher Education |
| Undecided |

The anticipated results and outcomes of the ROPES program aligned with the goals of providing access and support to disadvantaged P-12 students, promoting academic and career readiness, and fostering equity in education. ROPES aimed to create a transformative educational experience that opened doors to future success by addressing the challenges exacerbated by the pandemic and empowering students from underrepresented backgrounds.

**Assessment**

The ROPES program had a dedicated program assessment individual. Participant and instructor feedback were obtained via pre- and post- surveys, and focus group meetings. A summary of the program feedback from participants are summarized below:

- Coordination
    - The program team successfully coordinated colleges and divisions at Rowan and local school districts to provide intended services to the target student population.
    - One school counselor suggested that specializations in health services and pre-med be added, as many students showed interest in these fields.
- Communication
    - Students did not clearly understand the commitment level required by the program.
    - Online instruction for select disciplines such as engineering and computer science were challenging
- Course scheduling
    - Many students had time conflicts with student clubs and sports activities.
        - This problem appeared to be localized. At least one school district did not have any problem with course scheduling.
        - One school counselor said that the online courses worked well for his students, but the in-person option would be more impactful. However, logistically this will pose problems because of transportation needs for far away schools.

- Summer Institute (Summer 2022)
    - Students were highly satisfied with the summer institute
    - Students reported that the institute's activities improved the short-term outcomes.
    - Select schools were dissatisfied with transportation
- College application workshop (Fall 2022)
    - Participants were satisfied with the workshop.
        - All respondents agreed or strongly agreed that they were satisfied with it.

**Participating Faculty Feedback**

Participating faculty also had an opportunity to provide feedback on the program through one on-one interviews and online surveys. A summary of the findings is provided below:

a) Better vetting of participating students for the program

b) Improved scheduling of classes to minimize student conflicts

c) Faculty training on DEI

d) In-person classes (challenging as transportation to and from campus for various schools will be required and finding a common time etc)

e) Providing a preparatory camp for the students ahead of the program start

## Conclusions

The ROPES program at Rowan University emerged as a compelling solution to the formidable obstacles confronted by P-12 students in the aftermath of the COVID-19 pandemic. By adopting a dual enrollment framework aligned with the institution's objectives and the State Plan for Higher Education, ROPES presented a life-changing opportunity for economically disadvantaged, first-generation, and underrepresented students in South Jersey. ROPES directly addressed the consequences of extended remote learning, which resulted in learning setbacks and heightened rates of depression and anxiety for students, educators, and parents alike. Through its provision of academic reinforcement and comprehensive support, ROPES sought to redress disadvantaged students' educational disparities and ensure a smooth transition to postsecondary education. In conclusion, the ROPES program represented a pivotal initiative that tackled the immediate educational challenges of the pandemic and established a groundwork for long-term success and empowerment. ROPES could revolutionize students' lives, foster diversity in the future workforce, and establish a more inclusive and equitable educational landscape in South Jersey and beyond through its comprehensive approach, tailored support mechanisms, and unwavering commitment to equity.

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