



**EDUCATION AND EMPLOYMENT RESEARCH CENTER**

# Executive Summary: Illuminating Economic Development in Community Colleges: Lessons from NSF ATE Grants

Michelle Van Noy and Radha Biswas

JANURARY 2024



**RUTGERS**

School of Management  
and Labor Relations





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## About The Authors

**Michelle Van Noy** is the director of the Education and Employment Research Center at Rutgers University.

**Radha Biswas** is a researcher at the Education and Employment Research at Rutgers University.

# Contents

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Executive Summary	1
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# Executive Summary

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Economic development is an important area of focus for community colleges when implementing programs and activities that build on students' technical skills. Within this context, economic development refers to the activities and services that provide support for current jobs or the creation of new jobs in a given region. Community colleges play an active role in this development by providing students with classes, programs, and certifications that focus on the specific technical skill sets that best contribute to the workforce and economic growth of their own regions. The project presented here explored the relationship between community colleges and economic development—not just overall economic development but, specifically, inclusive economic development. Inclusive economic development promotes jobs equally for all groups, including historically marginalized groups such as people of color and people in low-income areas. This research examined how the NSF Advanced Technological Education (ATE) program, a highly supportive program that prepares community college students for the technical (STEM) workforce and further education, contributes to economic development in three main areas: education and training, connecting students with local businesses, and engaging with broader regional industries. Across several projects spanning the past five years, the EERC interviewed 28 ATE grantees about how their activities and programs supported economic development through the education and training of students in technician areas.

The analysis of these interviews led to important findings on the engagement community colleges have with economic development. Overall, in terms of education and training, only a few grantees designed their programs with the direct intention of furthering economic development. Grantees that were working in centers were more likely to have goals targeting regional economic development activities. This stronger connection was likely because centers tended to be connected to a specific region, where it was easier to assist their students in engaging with local employers. Many grantees emphasized working with businesses in industries directly tied to the growth of their local economy, which led to different types of engagement with businesses that spanned a variety of industries. For example, some grantees connected with industries that engaged with students by offering hands-on learning or co-ops. The diverse forms of engagement that ATE grantees fostered helped to expand work-based learning programs in community colleges and promoted economic growth during the time the students were working with these businesses.

For the business support aspect of economic development, most grantees chose to connect to local businesses in some way. Some grantees offered entrepreneurship and leadership training; focused specifically on the development of small businesses by offering the use of their technology to offer hands-on training programs.

Many grantees focused on regional engagement. Most performed economic scans of industry-specific trends to support regional economic growth with their research. Some promoted the further development of broader economic goals by offering internships testing and working with new technologies. Some grantees attracted businesses to their regions through their programs and engagement with students, which promoted local economic and technological growth. Overall, many grantees were able to build relationships with employers, collaborate with broader industries, and convene with regional stakeholders.

Another purposeful goal of this research was to understand the connection ATE grantees had to their own communities when promoting inclusive economic development. The results showed that many of the grantees intentionally included outreach to high-need communities in their programs or center activities. These grantees focused on making their programs more accessible to a wide range of communities, such as high school students in majority-Hispanic areas.

These findings show the importance of having and promoting community college programs like those funded through NSF's ATE program. Students with access to community colleges learn technical skills and are able to engage directly with local businesses and industries, fostering regional economic development. Technical and business-engagement programs at community colleges offer important opportunities to a diverse range of students.



# About

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## The Education and Employment Research Center

Rutgers' Education and Employment Research Center (EERC) is housed within the School of Management and Labor Relations. EERC conducts research and evaluation on programs and policies at the intersection of education and employment. Our work strives to improve policy and practice so that institutions may provide educational programs and pathways that ensure individuals obtain the education needed for success in the workplace, and employers have a skilled workforce to meet their human resource needs. For more information on our mission and current research, visit [smlr.rutgers.edu/eerc](http://smlr.rutgers.edu/eerc).

### EERC Areas of Focus

Community College Innovation



Student Choices and Pathways



STEM and Technician Education



Noncredit Education and Non-Degree Credentials



Education and Labor Market Connections



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Rutgers' School of Management and Labor Relations (SMLR) is the leading source of expertise on the world of work, building effective and sustainable organizations, and the changing employment relationship. The school is comprised of two departments—one focused on all aspects of strategic human resource management and the other dedicated to the social science specialties related to labor studies and employment relations. In addition, SMLR provides many continuing education and certificate programs taught by world-class researchers and expert practitioners. For more information, visit [smlr.rutgers.edu](http://smlr.rutgers.edu).

## National Science Foundation

The U.S. National Science Foundation (NSF) is an independent federal agency that supports fundamental research and education across all fields of science and engineering. In Fiscal Year 2022, its budget is \$8.8 billion. NSF funds research in all 50 states through grants to nearly 2,000 colleges, universities and other institutions. Each year, NSF receives more than 50,000 competitive proposals for funding and makes about 12,000 new funding awards.

With a focus on two-year Institutions of Higher Education (IHEs), the Advanced Technological Education (ATE) program supports the education of technicians for the high-technology fields that drive our nation's economy. The program involves partnerships between academic institutions (grades 7-12, IHEs), industry, and economic development agencies to promote improvement in the education of science and engineering technicians at the undergraduate and secondary institution school levels. The ATE program supports curriculum development; professional development of college faculty and secondary school teachers; career pathways; and other activities.



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## **Rutgers Education and Employment Research Center**

Janice H. Levin Building

94 Rockefeller Road

Piscataway, New Jersey 0885

[smlr.rutgers.edu/eerc](http://smlr.rutgers.edu/eerc) | Email: [eerc@smlr.rutgers.edu](mailto:eerc@smlr.rutgers.edu)



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