

THOUGHT LEADERS' DIALOGUE FOCUSES ON NSF ATE PROGRAM

On May 11, 2023, the [Community College Presidents' Initiative in STEM \(CCPI-STEM\)](#) and [The League for Innovation in the Community College](#) convened the first Thought Leaders' Dialogue. The online meeting sought insights from community college leaders to catalyze engagement in STEM initiatives, particularly the [National Science Foundation's Advanced Technological Education \(NSF ATE\) program](#).

The robust discussions that occurred in moderated small groups via Zoom identified challenges some community colleges have encountered in obtaining and executing ATE grants. A second dialogue is planned for early November.

Attendees who have had successful ATE grants shared their experiences with several describing how they used ATE grants to partner with employers to boost economic development in the regions served by their colleges. Additionally, participants discussed the role of the grants in spurring creative thinking and action in support of new program offerings or expansion of current programs and diversity in student access and success.

ATE uses a rigorous review process—that considers intellectual merit and broader impacts—to award funding for innovative technician education programs in which two-year college faculty have leadership roles. ATE is NSF's largest investment in two-year colleges; the program has enjoyed bipartisan Congressional support since it was created by NSF following the passage of the Scientific and Advanced Technology Act in 1992.

"I feel very safe saying that there's a tremendous amount of interest nationally in this [technician education] role that community and technical colleges play very effectively, and that the Advanced Technological Education or ATE program can help you support the programs that you have at your institutions," Dr. V. Celeste Carter, the NSF program director who leads the ATE program, told the 91 Dialogue attendees.

"Every single one of you has business and industry that relates to STEM fields. And so, the ATE program supports industries where the knowledge, skills, and abilities, and the technology advances are changing what workers really need to know," Carter said, adding that she hopes all the colleges represented at the dialogue submit ATE grant proposals. ATE's current annual budget is \$76 million; recent legislation authorizes funding to more than \$150 million.

The fact that only about 22% of the nation's community colleges have shared in the \$1.2 billion in ATE grants awarded during the past 30 years prompted both the dialogue and CCPI-STEM, an ATE grant that aims to strengthen the STEM technical workforce by expanding community college senior administrators' understanding of the ATE program.

The NSF has a long history of supporting meetings to gather insights about questions of science and to provide direction for its funding of research. NSF-funded meetings in the late 1980s and early 1990s influenced the development of the ATE program. More recently recommendations from the [Undergraduate Research Experience Summit](#) in 2019 led to additional funding for ATE projects and centers that add student research opportunities to their initiatives.

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Dr. Rufus Glasper, president and CEO of The League for Innovation in the Community College, said concern about the “missing millions” of students who could be benefiting from ATE-funded projects led to the League’s collaboration with CCPI-STEM.

Glasper said he recognizes that there are differences in capacities between institutions, but that he hopes the dialogue serves as “the beginning and an additional step to trying to engage our colleges about understanding the [ATE] process, understanding how they can begin to work both individually and collectively as organizations so that you can be more successful in the process to not get discouraged.”

At the close of the meeting, the moderators of the small groups gave brief oral summaries of the discussions that included these points:

- Many dialogue participants were not aware of the mentoring available to help faculty from community colleges, which have not had recent ATE grants, prepare competitive proposals. [For more on these mentoring opportunities see <https://www.ccpi-stem.org/resources>.]
- The ATE grant application process can be intimidating for faculty at colleges that do not have grants offices and for those who are already teaching overloads.
- Small, rural colleges that could benefit most from ATE grants have the least capacity to submit proposals and carry them out.
- Community college presidents and vice presidents need professional development that explains NSF, ATE, and the value of improving the STEM technical workforce.
- Community college educators are interested in consortia for interdisciplinary approaches and multi-college networks to support STEM workforce development efforts.
- Community colleges need stronger infrastructures to support faculty as they prepare ATE applications, develop new programs funded with ATE grant awards, and manage ATE grants.
- Participants recommend simplifying the ATE application process.
- Faculty need strategies for responding when new community college presidents do not see the value of ATE grants or other STEM workforce initiatives.

The goal of CCPI-STEM is to engage, educate, and galvanize community and technical college presidents and senior leaders through its regional network structure. The aim is to share the commitment of NSF ATE by highlighting regional examples, sharing existing support mechanisms, promoting institutional and business/industry collaborations, and encouraging participation in the grant process to expand STEM education on campuses and the ways in which institutions can meet labor demands and diversify the workforce.

Dr. Charlene M. Dukes, co-principal investigator of CCPI-STEM and president emeritus of [Prince George’s Community College](#), thanked all the participants and noted a full report from the dialogue will be released later this summer. Dukes urged all those in the meeting to join the CCPI-STEM Regional Affiliate that covers their part of the country and participate in the next Thought Leaders Dialogue in the fall.

“We’re here to hear from you as you think about your role in the community college and how we as a sector can answer the clarion call to educate our students through transformative and innovative programs in STEM that are designed to meet current and future workforce needs,” Dukes said.

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