

Thought Leaders' Dialogue Report

from

**The Community College Presidents' Initiative
in STEM**

&

**The League for Innovation in the Community
College**



PRINCE GEORGE'S
COMMUNITY COLLEGE

Colleagues,

Thank you for your attendance and overwhelming participation in the inaugural “Thought Leaders' Dialogue” convened jointly by The League for Innovation in the Community College (The League) and the Community College Presidents’ Initiative in Science, Technology, Engineering and Mathematics (CCPI-STEM). As partner entities, we are deeply committed to the vision, mission, and transformative environment of the nation’s community colleges. Since inception, from Joliet Junior College to more than 1,000 public two-year institutions, we remain resolute in our belief that community colleges change lives, change families, and change communities.

It is notable that the first concern articulated was “about the missing millions of students who could be benefiting from ATE-funded programs.” Historically, from access to retention to success, community colleges’ first commitments have been about the diversity of students who entered our doors seeking opportunities to realize their dreams and aspirations. It is because of your unrelenting dedication that The League and CCPI-STEM wanted to hear your voices and continue to support the creation and sustainability of innovative programming designed and focused on responding to the clarion call to fill millions of technical skilled positions in business and industry across the country and beyond.

Community colleges are significant to the local and regional economic ecosystems—educating students, contributing to social networks, and participating in civic engagement. Students enter our doors hungry for education and leave ready to conquer the world! And, leadership is essential to ensuring that students’ needs and aspirations are addressed.

We believe that investments in community colleges by the NSF Advanced Technological Education can be one avenue to meeting institutional goals and workforce needs. As noted on the National Science Foundation’s (NSF) website, the 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.”*

It is through the creation of these partnerships and others that The League and CCPI-STEM are committed to the provision of information through Regional Networks. These networks are designed to support community colleges wishing to join their colleagues who are successful in applying for and acquiring NSF ATE grants that ignite their institutions and serve their students.

The Thought Leaders’ Dialogue Report amplifies your voices, as you shared the ways in which the National Science Foundation can better serve you. Please visit the website at www.ccpi-stem.org to share how we can best serve you.

Sincerely



Charlene M. Dukes, EdD, Co-PI
CCPI-STEM



Rufus Glasper, PhD, President and CEO
The League for Innovation in the Community College

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Executive Summary

Thought Leaders' Dialogue Focuses on NSF ATE Program

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

ATE is the independent federal science agency's largest investment in two-year colleges. NSF has invested more than \$1.4 billion in the ATE program. However, since 1994 only about half of the nation's two-year colleges have received an ATE grant. Many of the community and technical colleges that have successfully navigated NSF's merit review process have received multiple grants.

Dr. Rufus Glasper, president and CEO of The League for Innovation in the Community College, explained to the 91 people who participated in the dialogue that concern about the "missing millions" of students who could be benefiting from ATE-funded programs led to the League's collaboration with CCPI-STEM.

Dr. Charlene M. Dukes, co-principal investigator of CCPI-STEM and president emeritus of [Prince George's Community College](#), told participants, "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."

Key Points Raised during Breakout Sessions

The meeting closed with the moderators of the small groups, which had met for 60 minutes in breakout rooms, sharing the key points made during the discussions:

- Many dialogue participants were not aware of the mentoring available to help faculty members from those community colleges that have not had recent ATE grants prepare competitive proposals. [For more on these mentoring opportunities, see Appendix D.]
- 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 and 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 programs that improve 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.
- Faculty need strategies for responding when new community college presidents do not see the value of ATE grants or other STEM workforce initiatives.

Dialogue participants made the following suggestions to NSF:

- Simplify the ATE proposal process.
- Allow stipends from grant funds rather than teaching load reductions for principal investigators.
- Clarify whether bringing new colleges into the ATE program is penalizing previously funded community colleges when they submit new proposals.
- Modify the merit review process to give points to the institutions and leaders of previous well-executed grants as the US Department of Education does with TRIO programs.
- Select reviewers who understand the culture of community colleges.
- Address the misperception that community colleges and faculty without NSF grant experience will not be able to make competitive proposals.
- Improve the connections between NSF program officers and community college leaders and faculty.

Thought Leaders' Dialogue Focuses on NSF ATE Program

Introduction

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

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Dr. Rufus Glasper, president and CEO of The League for Innovation in the Community College, explained to the 91 people who participated in the dialogue that concern about the “missing millions” of students who could be benefiting from ATE-funded programs 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.”

Dr. Charlene M. Dukes, co-principal investigator of CCPI-STEM and president emeritus of [Prince George's Community College](#), thanked all the participants, urged them to join the CCPI-STEM Regional Network that covers their part of the country, and encouraged them to participate in the next Thought Leaders' Dialogue.

“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.

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 February 09, 2024

ATE Program Background

ATE uses a rigorous review process—one 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. Congress reauthorized the ATE program in 2022. ATE’s current annual budget is \$76 million; recent legislation authorizes funding to more than \$150 million.

At the opening of the dialogue Dr. V. Celeste Carter, the NSF program director who leads the ATE program, said, “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.”

Carter shared her hope that all the colleges represented at the dialogue would submit ATE grant proposals in advance of the deadline on October 5, 2023. “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.

CCPI-STEM Mission

CCPI-STEM engages, educates, and provides resources to community and technical college presidents and senior leaders through its regional networks, Fellows program, modules, webinars, and newsletter.

All CCPI-STEM activities and resources as well as the information it shares about ATE projects and centers aim to encourage participation in the ATE program. CCPI-STEM highlights how ATE grants help associate-degree-granting institutions expand and improve technician education and develop partnerships with business and industry that help colleges meet employers’ needs while diversifying the STEM technical workforce.

NSF Support of Meetings

NSF has a long history of supporting meetings to gather insights about questions of science and to provide direction for its investments in research, new technologies, and agency programs.

Meetings convened with NSF support 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.

Summary of Breakout Sessions

Zoom’s technology was used to move the participants electronically from the full group meeting into one of six virtual breakout rooms. In the breakout rooms, individuals could see and talk with other attendees who had been randomly moved to the same room.

Each breakout room discussion was led by a moderator, who is part of the CCPI-STEM project leadership team. Moderators posed a list of questions (See Appendix B) prepared by the dialogue planning committee, which also provided tips for encouraging responses from all the people in the breakout rooms. Scribes were given templates with the questions for taking notes about what people said during the discussions.

Participants ranged from individuals who have served as principal investigators of multiple grants to faculty who have submitted at least one proposal and not been funded to those who knew very little about the workings of ATE program or its goals.

Positive Outcomes of ATE Grants

The breakout sessions began with the moderators asking the people in each of the small groups to identify if they have had been involved in an ATE-funded initiative and to share the outcomes of that funding. Respondents in each of the small groups mentioned ATE grants supporting faculty professional development, adding new curricula, and fostering productive partnerships with industry and business. Participants who have been ATE principal investigators—as NSF calls the leaders of funded initiatives—mentioned the role that the grants had in improving relationships with advanced technology employers, spurring creative thinking among partners, instigating activities beyond campuses to support new programs, and adding to enrollment, as well as improving students’ academic performances and career prospects.

Caron L. Daugherty, president of Flint Hills Technical College in Kansas, pointed out the private-public partnerships that are woven into ATE initiatives allow academia to respond to the things that employers say they need in workforce development. She said when community college faculty members interact with employers it helps frame activities and establish a foundation for relationships so that when more opportunities arise, community colleges are prepared to capitalize on them. In an email after the Thought Leaders’ Dialogue, Daugherty wrote: “Those partnerships are critical to the support of the workforce, the community engagement, the student learning, and the economic stability and development in a community.”

Unduplicated comments mentioned ATE grants instigating new articulation agreements and helping community colleges to obtain high-tech equipment.

There were numerous remarks about ATE initiatives serving as professional development activities for the faculty involved in them as well as funded sources of professional development programs for other educators.

Helping Rural Colleges with Grants Fosters Collaborations in Ohio

To help small and rural two-year colleges in Ohio prepare competitive grant proposals, [Columbus State Community College](#) shares the expertise of its 20-person grants office staff on a fee-for-service basis.

This collaborative arrangement began in 2018 when Marion Technical College President Ryan McCall asked Columbus State President David Harrison if the urban college’s grants staff could help the rural college apply for a Title III grant. Marion Tech had previously applied three times for this federal grant without success, despite the services of a consultant.

Around this time McCall had also interviewed people for a full-time grant writer, but none of the applicants had experience with the large grants that he and Marion Tech's board wanted to seek.

McCall said the idea of contracting with Columbus State grew from Marion Tech's positive experience working with the urban college on a state regional grant that required collaboration.

Since 2018 Marion Tech has received its first and second ATE grants, its first Title III grant, and its first TRIO grant. McCall describes the \$5 million from four grants as a fine return on investment.

"I have access to the whole team for less than half of what it would cost me to hire a grant writer," McCall said.

Over the years the trust that started with McCall and Harrison has spread to administrators and faculty at both institutions, which have led to other collaborations.

For instance, Columbus State is a sub-awardee on the ATE grant that Marion Tech received in 2023 for its Incorporating Virtual Reality into Advanced Manufacturing Technician Education at a Rural Community College project. Marion Tech is also a sub-awardee on Columbus State grants.

McCall said, "In many ways we are benefitting from each other. There are grants that we would not have the opportunity to be part of, but that we can come along side or be part of a grant that they are able to get and vice versa."

Shane Kirby at Columbus State agrees. "The partnership has continued to benefit both of us, and allowed us to have a steady partner that now knows grants well, that can work on consortium proposals ... That has been a phenomenal relationship," Kirby said. He is the director of Advancement Partnerships at Columbus State Community College and curriculum module developer for CCPI-STEM. He is also a mentor for the Pathways to Innovation ATE Grant Seeker Academy and executive director of the Goldman Sachs 10,000 Small Businesses Program in Columbus.

Kirby also describes the arrangement that Columbus State now has with several small and rural colleges as mutually beneficial. The smaller colleges access services ranging from proposal-writing to post-award management at less cost than they would incur adding employees. Columbus State gains income that it uses to add staff members, who work in teams on multiple grants.

"We have almost a naturally built-in consortium of colleges that we work with," Kirby said.

Kirby thinks what the Ohio community colleges are doing could be replicated elsewhere. “We have different levels of service that I think other colleges could provide or just take the model and find out what works for them,” he said.

Natalia Chekhovskaya reported that ATE grants had provided Indian River State College in Florida with funding for personnel, equipment, and materials. She is the principal investigator of the Center for Laser and Fiber Optics Education (LASER-TEC), an ATE center at the college. “Thanks to the support of NSF ATE funding, Indian River State College and the partnering two-year colleges were able to establish critical institutional infrastructure to grow and expand photonics technician programs,” she wrote in an email after the Thought Leaders’ Dialogue.

Chris McNally, a professor and chair of Applied Technologies at [Hudson Valley Community College](#) in New York, said ATE grants have opened “avenues for collaboration and networking with other institutions.”

Several speakers praised NSF program officers for their flexibility, treatment of principal investigators as researchers exploring hypotheses, and encouragement to use evaluations to inform their work and adjust plans in response to data as necessary to achieve their goals.

Spartanburg Community Colleges Uses 2 ATE Grants to Meet Strategic Goals

Over the past decade Spartanburg Community College’s Computer Technology Department used two ATE grants—one focused on cybersecurity and one focused on data analytics—to address regional workforce shortages, according to Cheryl Cox. She was vice president of Academic Affairs at the college until her retirement in 2022.

“The ATE process and resources allows a college to create programs that are needed and to do so in a manner that ensures excellence and sustainability,” Cox wrote in an email after the Thought Leaders’ Dialogue. She attended the virtual meeting to gather information for Greenville Technical College, where she is currently interim dean of Arts and Sciences.

In an email Cox explained how Spartanburg used its ATE grants to support the workforce and economy of the college’s service area, which are goals woven into the college’s mission and strategic plan.

Cox wrote: “We submitted proposals focused on developing programs and building industry relationships that had been identified as a need in our area. For a successful [ATE] grant, industry representatives must be involved and engaged.

“They have to provide not just letters of support, but also information on workforce shortages. They provide the expertise, along with the college’s faculty, to develop curricula that meet industry

needs as well as providing insight into necessary equipment, software, etc. Eventually, they hire the graduates.

“This process worked quite well with both cybersecurity and with data analytics and allowed the college to launch two excellent programs that are well enrolled, whose graduates readily find employment.”

Challenges to Pursuit & Management of ATE Grants

The difficulty of faculty finding the time to write ATE grant proposals is the initial hurdle at some community colleges. Constrained faculty schedules are an especially large impediment at institutions that do not employ grant writers nor assign specific staff members to manage external funds.

As one college administrator pointed out “the smallest schools that could benefit the most [from grants] are the least able to do them.”

Several participants noted that for educators who are writing their first ATE project proposal it can be intimidating to decipher the *Proposal & Award Policies & Procedures Guide* (PAPPG) and ATE program solicitation requirements.

The next hurdle for faculty—and one that many participants mentioned as persisting when a grant has been funded—is figuring out how to manage grant work with extremely large teaching loads. In addition, many community college instructors routinely teach overloads.

A further complication at some colleges is that faculty contracts are for only nine or 10 months. This means that people have to be persuaded to add grant work in the summer when they would otherwise be free to pursue other interests or employment.

Several participants pointed out that even when faculty release time is included in a grant award it can be extremely difficult to hire qualified individuals in technical disciplines to serve as adjunct instructors to take the place of ATE principal investigators (PIs) in classrooms and labs while the PIs focus on their ATE projects.

The reluctance of other college staff members to take on grant-related accounting tasks or provide grant management support has been an impediment at some colleges.

Another factor mentioned in several of the breakout rooms is the resistance faculty have encountered from colleagues and senior administrators who have questioned the value of pursuing ATE grants to fund their ideas for improving technician education programs.

Administrator Explains Challenge of Fitting Immediate Workforce Needs in ATE Process

Catherine Ciha, director of Proposal Development & Strategic Communications at [Cuyahoga Community College \(Tri-C\)](#) in Ohio, noted that even colleges that have had NSF ATE grants in the past struggle to fit community needs within the parameters of the proposal process.

“A lot has changed in the past 10 years, both on campus and in the world. [We] cannot assume what has been done before will work again or be the right approach; need to understand how vision fits with what is fundable,” she said during the virtual meeting.

In response to a follow-up question, Ciha noted that she was not at Tri-C a decade ago and wrote the following about the STEM workforce challenges she and the college are addressing now, “There’s a new immediacy today: We’re looking to develop programs with specific technical certifications that will quickly put potential workers in high-demand, technician-level jobs with sustaining pay and career possibilities. These jobs are waiting for workers today. This definitely aligns with Tri-C’s priorities.”

Cheryl Cox, interim dean of Arts and Sciences at [Greenville Technical College](#) in South Carolina, noted that it is critical for faculty to align ATE project ideas with department needs and the strategic goals of their college. “The beauty of the ATE grants is that they align so well with the strategic approach of the college,” Cox wrote in an email after the meeting. Greenville Tech has not had an ATE grant; Cox was referring to her experience as vice president of Academic Affairs at [Spartanburg Community College](#) in South Carolina prior to her retirement in 2022.

Susanne Brock, senior director of Innovation and Development at [William Rainey Harper College](#) in Illinois, shared that Harper College uses a decision-making matrix to evaluate proposed goals and institutional capacity when considering grant opportunities.

Brock reported that she has found faculty are more motivated to become involved in grants if they understand how the project improves students’ educational and career success and increases their potential to obtain good jobs when they leave the college.

“The biggest benefit is that it gives faculty and staff an objective means to evaluate capacity and determine what projects to pursue, how the project aligns with college goals and priorities, and if the college has the resources/capacity/expertise to effectively administer the grant if awarded,” she wrote in an email after the Thought Leaders’ Dialogue.

Several people cited personnel turnover among faculty, administrators, and industry partners as an issue for maintaining project momentum.

Central Community College Nominates Leaders of Grant-funded Projects for League for Innovation Awards

Matt Gotschall, president of [Central Community College](#) in Nebraska, nominates faculty who successfully execute grants for awards from the League for Innovation in the Community College. The League's Innovation of the Year Awards recognize innovative programs, practices, partnerships, and activities. League Excellence Awards recognize outstanding faculty, staff, and college leaders who have made a significant difference in the lives of students and in the communities their colleges serve through excellence in teaching and leadership.

"Between National Science Foundation, US Department of Education, and US Department of Labor grants, I, or my predecessor president, have nominated approximately seven Innovation of Year Awards to groups implementing the grants," Gotschall explained in an email.

"The Excellence Awards are newer awards, but in total since multiple individuals can be recognized, I have nominated and—the League awarded—over a dozen individual awards in just five years," he wrote.

Gotschall reports that award recipients have appreciated the opportunity to travel to the League's annual conference to receive their awards and have submitted proposals to present information about their projects at the conference. The college also spotlights national awards and the projects that led to them with press releases, as well as posts on its website and social media.

Attributes of a Grant-Seeking College Culture

Participants from colleges that have received ATE grants or other competitive funding reported that presidents, senior administrators, and trustees encourage faculty to apply for grants.

Some of these colleges back up their verbal support for a grant-seeking culture with one or more of these incentives: release time to prepare grants; reduced teaching loads to lead grants; recognition of grant-related work in determining rank, promotions, and/or tenure.

One participant reported that his college boosts interest in grants by sending a portion of grants' indirect funding to principal investigators' departments.

Wake Tech Gives Credit for Involvement in Grants in Faculty Rank Process

For ten years [Wake Technical Community College](#) in North Carolina has considered involvement in grants when determining faculty rank. The college does not have a tenure process.

Amy MacDonald, dean of Sponsored Programs at Wake Tech, mentioned this incentive during the breakout session. In an email afterward she explained that the rubric used in the rank process awards points for “exemplary service to the college.” Activities that qualify as exemplary service include work on grants and development of professional relationships.

“The faculty member documents their involvement in writing grants, service on grant-writing committees, or service in some capacity on a grant-funded initiative; or the faculty member documents the relationships they have built with industry or university colleagues that enhance opportunities for students,” she wrote. The rank process is a formal policy administered by a committee with oversight by the college’s chief academic officer.

“We have found that by being a factor in faculty rank, grants are recognized as an important service to college that demonstrates leadership. We have found faculty who are on a path to receive rank and pursue grants are innovative and like to conduct research,” MacDonald wrote.

Discouragements to Pursuit of Additional ATE Grants

When ATE grantees were asked if they might be disinclined to apply for ATE grants in the future, the reasons cited included the following: a lack of certainty about NSF requirements and their institutions’ capacity to comply; lack of college leaders’ support for starting new programs; difficulties with another federal agency’s grant; supply chain issues that delayed delivery of equipment; and other facility and equipment limitations that constrain the potential to scale grant-funded activities.

Gotschall of [Central Community College](#) shared the difficulty of rallying faculty and industry partners’ enthusiasm for revising and resubmitting a proposal that has been declined, even if the proposed project would extend an existing initiative.

He questioned whether the ATE program’s focus in recent years to encourage proposals from colleges that have never had ATE grants means that previously funded colleges are at a disadvantage.

He also asked if NSF’s reviewers could award points for successful execution of previous ATE grants.

Ashok Agrawal, the CCPI-STEM Fellows coordinator who served as a scribe, explained to the breakout group that NSF reviewers receive the information that grant applicants provide about their prior grant support. Reviewers may consider prior support among many factors in their individual ranking of the proposals they review. NSF, however, does not award points based on prior support.

Key Points Raised during Breakout Sessions

CCPI-STEM organized the Thought Leaders' Dialogue to inform its outreach to community college leaders and faculty at institutions that have not had ATE grants. Attendees' responses to questions during the breakout sessions will inform the workings of the CCPI-STEM network of regional affiliates. They will also influence the content of the modules CCPI is creating to help senior administrators and future community college leaders understand the value of the National Science Foundation and its processes.

In response to what they learned during the May 2023 meeting, CCPI-STEM leaders began planning a second Thought Leaders' Dialogue. It will be February 09, 2024.

The brief oral summaries the breakout session moderators shared at the close of the meeting included the following points:

- Many dialogue participants were not aware of the mentoring available to help faculty members from those community colleges that have not had recent ATE grants prepare competitive proposals. [For more on these mentoring opportunities, see Appendix D.]
- 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 and 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 programs that improve 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.

Recommendations to the National Science Foundation

The conversations during the breakout sessions included not just litanies of challenges, but also suggestions about what personnel at the National Science Foundation could do to encourage broader participation by educators at two-year technical and community colleges.

Participants made the following suggestions to NSF:

- Simplify the ATE grant proposal process.
- Allow stipends from grant funds rather than teaching load reductions for principal investigators.
- Clarify whether bringing new colleges into the ATE program is penalizing previously funded community colleges when they submit new proposals.
- Modify the merit review process to give points to the institutions and leaders of previous well-executed grants as the US Department of Education does with TRIO programs.
- Select more reviewers who understand the culture of community colleges.
- Address the misperception that community colleges and faculty without NSF grant experience will not be able to make competitive proposals.
- Improve the connections between NSF program officers and community college leaders and faculty.

Appendix A) Dialogue Participants

[with symbols for moderators, scribes, CCPI & League leaders]

Name	Institution	State
Cynthia Grove *	Phillips Community College of the University of Arkansas	AR
Robin Piccirilli	The League for Innovation in the Community College	AZ
Rufus Glasper ♦	The League for Innovation in the Community College	AZ
Cynthia Wilson ♦ ♣	The League for Innovation in the Community College	AZ
Kristina Whalen	Foothill De Anza Community College District	CA
Sunita Cooke	MiraCosta College	CA
Eugene Mahmoud	Mt. San Antonio College	CA
George Boggs ♦	Palomar College	CA
Michelle Fischthal	San Diego Community College District	CA
Milford Muskett	Bureau of Indian Education/US Department of the Interior	DC
Angel Rodriguez	Broward College	FL
Blake Urbach ♦	CCPI-STEM	FL
Diane Olsen	Daytona State College	FL
Natalia Chekhovskaya	Indian River State College	FL
Gretchen Mullin-Sawicki	St. Petersburg College	FL
Kristeen Gammon	Valencia College	FL
Rassoul Dastmozd	Project Vision	FL
David Potash	City Colleges of Chicago	IL
Avis Proctor	Harper College	IL
Maria Coons	Harper College	IL
Susanne Brock	Harper College	IL
Sylvia Jenkins ♣	Moraine Valley Community College	IL
Elijah Ward	Prairie State College	IL
Caron Daugherty	Flint Hill Technical College	KS
Anthony Funari	Johnson County Community College	KS
James Genandt	Manhattan Area Technical College	KS
Melanie Williamson *	Kentucky Community & Technical College System	KY
Georgette Antwine	Baton Rouge Community College	LA
Raven Dora	Baton Rouge Community College	LA
Sarah Barlow	Baton Rouge Community College	LA
Hillary Williams Jr	Delgado Community College	LA
Christie Landry	Fletcher Technical Community College	LA
Jane Jones	Carroll Community College	MD
Ashok Agrawal	CCPI-STEM	MD
Charlene Dukes ♦ ♣	CCPI-STEM	MD
Elizabeth Hawthorne ♦ ♣	CCPI-STEM	MD
Fran Melvin ♦	CCPI-STEM	MD

June Fordham ♦ *	CCPI-STEM	MD
Madeline Patton ✱	CCPI-STEM	MD
Vera Zdravkovich ♦ ♣	CCPI-STEM	MD
Nichole Pollard	Frederick Community College	MD
Charles Lepper	Grand Rapids Community College	MI
Beverly Walker-Griffea	Mott Community College	MI
CharMaine Hines	Wayne County Community College	MI
Crystal Brown	Wayne County Community College	MI
Diane Gonzales	Wayne County Community College	MI
Tara Martinez	Anoka Technical College	MN
Amy Newsom	South Central College	MN
Amy MacDonald	Wake Technical Community College	NC
Michael Daniels	Western Piedmont Community College	NC
Doug Pauley	Central Community College - Grand Island	NE
Marni Danhauer	Central Community College - Grand Island	NE
Matt Gotschall	Central Community College - Grand Island	NE
Michael Flesch	Metropolitan Community College	NE
Tom McDonnell	Metropolitan Community College	NE
Fidelis Foda-Kahouo	Hudson County Community College	NJ
Danielle Jacobs	Rider University	NJ
Mohamed Mohamed	Union County College	NJ
Terry Kidd	Borough of Manhattan Community College	NY
Burnett Joiner	College of Staten Island	NY
Allison Collins-Schroeder	Hudson Valley Community College	NY
Chris McNally	Hudson Valley Community College	NY
William Tucker	Suffolk County Community College	NY
Fara Afshar	Suny Suffolk County Community College	NY
David Harrison ♣	Columbus State Community College	OH
Catherine Ciha	Cuyahoga Community College	OH
Yvonne Askew	Cuyahoga Community College	OH
Mary Lou D'Allegro	Luzerne County Community College	PA
Pamela Silvers	Florence-Darlington Technical College	SC
Cheryl Cox	Greenville Technical College	SC
Keli Fewox	Piedmont Technical College	SC
Bryan Chase	Alamo Colleges District	TX
Michou Saint Hubert	Alamo Colleges District	TX
Lilly Garcia	Alvin Community College	TX
Monique Umphrey	Austin Community College	TX
Ellen Wills *	CCPI-STEM	TX
Jennifer Wimbish ♣	CCPI-STEM	TX
Yolanda Goins	Central Texas College	TX
Natalie Greenwell	Collin College	TX

Aaron Warren	Hill College	TX
Alisa Carter	Hill College	TX
Aaron Warren	Hill College	TX
Brian Dimmitt	Hill College	TX
Nicole Lowe	Hill College	TX
Rosalyn Hunter	Hill College	TX
Rukmani Kuppaswami	Hill College	TX
Sagar Paudel	Hill College	TX
Marva Lawrence	Houston Community College	TX
Tina Jackson	Higher Ed Texas Government	TX
Bethany Sansing-Helton *	Madison Area Technical College	WI
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◆ CCPI & League Leadership, * Scribes, ♣ Moderators ‡ Report Author

Appendix B) Breakout Room Questions

In the breakouts: Please note the following questions are intended to elicit certain information CCPI-STEM is looking for from participants. Moderators may adjust language or ask follow-up questions if doing so helps generate responses.

Question 1. 30 minutes total

- A. If you have **applied and received** at least one NSF ATE grant award:
 - What have been the positive impacts of your college's NSF ATE grant award(s)?
 - What challenges have faculty and staff faced in implementing the funded proposal and/or managing the grant?
- B. If you have **applied but have not received** an NSF ATE grant award:
 - What factors would encourage you and your team to apply for NSF ATE funds again?
 - For what reasons might you be disinclined to apply again?
- C. If you have **never applied** for an NSF ATE grant award:
 - What were the major factors in the decision not to apply?
 - Under what circumstances might you and your team decide to apply in the future?

Question 2. 10 minutes total

- A. How aware are you of the resources, such as mentoring opportunities, which are available to help a faculty team develop a successful NSF ATE proposal?
- B. If your team has used these resources, how helpful were they in securing an NSF ATE Award?

Question 3. 10 minutes total

Moderator discusses the importance of faculty role in applying for and implementing NSF ATE grant awards, then asks this question:

- A. What kinds of encouragement to apply for NSF ATE funding do faculty receive from upper-level leadership at your college?
- B. Do you agree that supporting NSF ATE can provide a professional development opportunity for faculty that updates their teaching, as well as a platform for building institutional infrastructure and support for regional economic development?

Question 4. 10 minutes

- A. How interested are you in establishing a culture at your college that is receptive to NSF ATE?
- B. What kinds of support would you need as an administrator to establish a culture receptive to NSF ATE at your institution?

Appendix C) Advanced Technological Education Program Resources

For more information about the Advanced Technological Education program see <https://new.nsf.gov/funding/opportunities/advanced-technological-education-ate>

To view the ATE program solicitation see https://www.nsf.gov/publications/pub_summ.jsp?WT.z_pims_id=5464&ods_key=nsf21598

For additional proposal submission information see the *NSF Proposal & Award Policies & Procedures Guide (PAPPG)* at <https://new.nsf.gov/policies/pappg>

To learn more about ATE professional development opportunities, innovative curricula, instructional materials, and other resources developed by ATE centers and projects see ATE Central's archive at <https://atecentral.net>

Appendix D) ATE Mentoring Initiatives Resources

FORCCE-ATE <https://www.forcce-ate.org/>

FORCCE-ATE (Fortifying Cybersecurity and Computing Education Through ATE Grants) offers team-based professional development and mentoring designed to help participants crystalize their innovative ideas and develop competitive proposals for external support.

Mentor-Connect <http://mentor-connect.org>

Mentor-Connect provides mentoring for nine months to college teams as they prepare ATE grant proposals. Mentor-Connect has an extensive free library of materials related to ATE proposal preparation and grants management.

MentorLinks <http://aacc.nche.edu/Resources/aaccprograms/mentorlinks>

MentorLinks helps two-year colleges to develop new technician education programs or strengthen existing programs in STEM fields through mentoring over a two-year period. It offers professional development, technical assistance, and networking opportunities to help mentee teams gain insights for building and sustaining programs.

Mentor Up <https://atementorup.org>

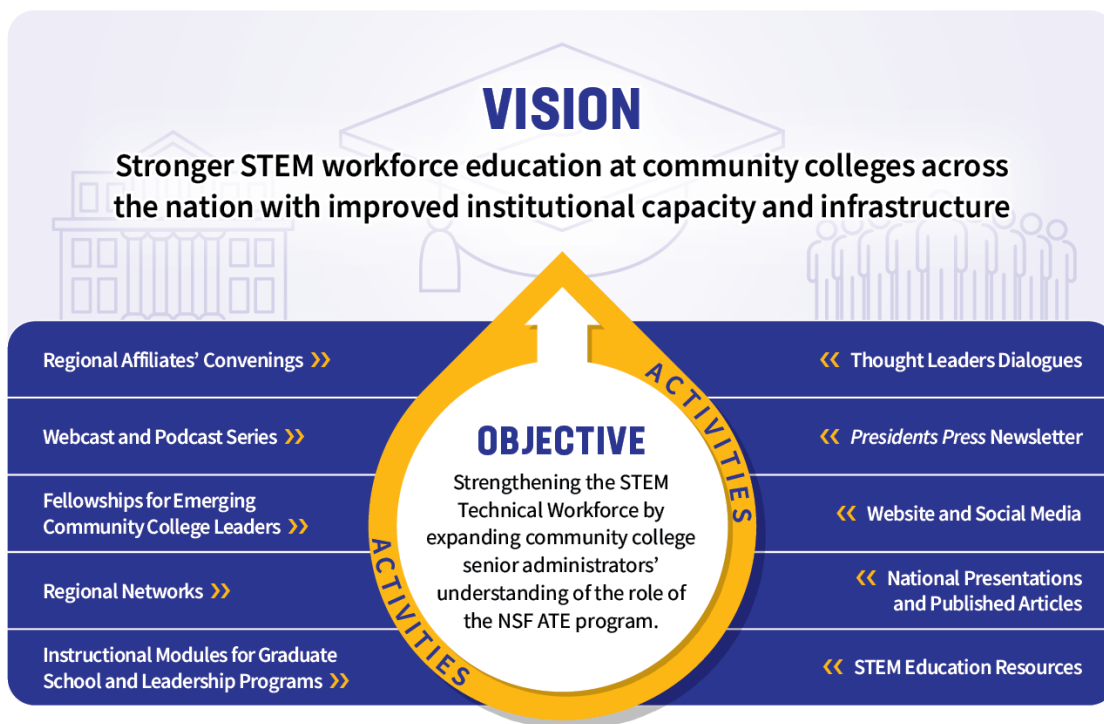
Mentor Up (Advanced Technological Education Grant Mentoring for Two-Year Colleges) offers faculty one-on-one mentoring with experienced principal investigators and past NSF program officers during a 2.5-day virtual proposal writing workshop. Mentor Up provides post-workshop webinars and proposal reviews too.

Pathways to Innovation <https://www.pathwaystoinnovation.org>

Pathways to Innovation fosters a culture of innovation using the Business and Industry Leadership Team (BILT) model through two complementary initiatives: **the BILT Academy** and the **Grant-Seeker Academy**. The BILT Academy offers one-on-one coaching for teams from community college STEM programs to engage employer partners. The Grant-Seeker Academy mentors grant-seeking college teams to use BILT elements to develop ATE proposals.

Project Vision <https://projectvis.org>

Project Vision provides two-year colleges with guidance from a team of ATE experts, former senior college administrators, and former NSF program officers, to generate ideas and support capacity building that helps administrators and faculty at mentee colleges discover and match innovative ideas with NSF funding opportunities.



CCPI-STEM's multi-faceted approach promotes STEM technician education, raises awareness of the ATE program, and builds institutional capacity for STEM initiatives.

For more information see <https://www.ccpi-stem.org>

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