

Community College Presidents' Initiative in STEM Considers *Lessons Learned & Future Plans*



The Community College Presidents' Initiative in Science, Technology, Engineering, and Math (CCPI-STEM) convened a meeting on September 18, 2026, at the AC Hotel National Harbor in Oxon Hill, Maryland, to share lessons learned since the project began in September 2021. The meeting participants were also asked for their input on how to sustain key aspects of the project.

CCPI-STEM's mission was to strengthen STEM workforce education at U.S. community colleges by informing two-year college administrators and trustees about the National Science Foundation's Advanced Technological Education program, and offering guidance on how to improve colleges' infrastructures to propose grants and manage grant awards.

Present throughout the day, the in-person attendees included Principal Investigator Calvin Stansbury, three Co-Principal Investigators, two industry partners who serve on the CCPI-STEM National Advisory Board, another National Advisory Board member who leads a national higher education organization, 12 CCPI-STEM Fellows, one Regional Network Chair, three Regional Network Coordinators, the CCPI-STEM Fellows Coordinator, Curriculum Director, CCPI-STEM Project Manager, Project Coordinator, external evaluator, and writer. An NSF Program Director attended the morning presentations; a representative of the Association of Community College Trustees, a CCPI-STEM partner organization, attended the afternoon presentations. A Co-Principal Investigator attended the meeting virtually.

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Opening

The meeting began with breakfast and attendees introducing themselves. The energy in the room was high and the CCPI-STEM leadership team was enthusiastic about accomplishing so many of the project's initial goals and other goals that evolved as the project developed.

From September 2021 to September 2026, CCPI-STEM interacted with 3,000 (unduplicated) individuals and 380 community colleges across the U.S. and in two U.S. territories—Puerto Rico and American Samoa.

Aside from reviewing the project's accomplishments, during the opening session CCPI-STEM leaders explained that they hoped this project wrap-up meeting would encourage the CCPI-STEM Fellows. They said they hoped the Fellows would utilize their fellowship experiences and the lessons shared at the meeting to continue their support of STEM education programs—particularly those aimed at preparing technicians for advanced technology fields—and their advocacy of the ATE program as they moved into community college leadership positions in the future.

In her welcome address, Co-Principal Investigator Dr. Charlene Dukes shared that when she was president of Prince George's Community College (PGCC), she signed several ATE grant agreements for CyberWatch, the ATE center focused on cybersecurity, and other ATE projects that NSF awarded to PGCC. However, she said, it was not until she began working on CCPI-STEM (following her retirement from PGCC) that she understood the ATE program's impact on strengthening the skilled technical workforce and its potential to transform community colleges' STEM programs, instructors' careers, colleges' relationships with industry, and communities' economic development initiatives.



Dr. Charlene Dukes

Through CCPI-STEM, Dukes said she also learned that it was of paramount importance for two-year presidents and senior administrators to support faculty who propose and lead grant-funded initiatives. “It was a real learning experience for me,” she said explaining that she gained new appreciation for the time and effort faculty put into ATE projects and the support they need from senior administrators and staff. She pointed out that ATE grants provide sources for innovations beyond what institutions’ budgets typically allow. “They help us to actually be creative,” she said.

CCPI-STEM’s Spark & Outcomes

CCPI-STEM began as the idea of Dr. Vera Zdravkovich. Prior to her retirement, she was the academic vice president at PGCC and served as the principal investigator of the CyberWatch Center, a national ATE center that focused on developing curricula for cybersecurity technician education associate degree programs. During her introductory presentation, Zdravkovich explained that from data and personal experience she knew that many senior administrators at two-year colleges around the U.S. were unaware that their institutions and faculty were eligible to participate in NSF’s competitive grant programs.



Dr. Vera Zdravkovich

Having led multiple ATE grants, Zdravkovich wanted to bring attention to the ATE program’s focus on two-year community and technical colleges. The ATE program supports faculty-led innovations in programs that prepare technicians for the high technology fields that drive the nation’s economy. The program solicitation specifies that ATE grants can be used for the following: “curriculum development; professional development of college faculty and secondary school teachers; career pathway development for both students and incumbent workers; and other activities including applied research projects that advance the knowledge base related to technician education.”

As she began her summary of CCPI-STEM’s activities, Zdravkovich said CCPI-STEM was created to have a “wide, national footprint” that informed community college presidents, senior administrators, faculty, and others about NSF and ATE. As the project began working, CCPI-STEM leaders learned there was a need to help colleges—particularly small and rural colleges—build their capacity to obtain and manage NSF grant awards.

“I think perhaps the most important thing that we have accomplished with all of this is growing the cadre of young people who will take the baton and carry it on in the future and putting that footprint of STEM throughout the nation ... that increased awareness of the importance of STEM, NSF and what it can do for the institution, for the people, for the faculty, and for everybody else,” Zdravkovich said.

Regional Networks

Development of the Regional Networks began in the first year and evolved throughout the project. By the fourth year of the project there were seven Regional Networks: Northeast, Midwest, Southeast, Southwest, Pacific, Pacific Southwest, and Three Rivers. Each Regional Networks was led by a Chair who was an active or recently retired community college president. CCPI-STEM Regional Coordinators were added in the grant’s second year to assist the Chairs as they reached out to community college leaders in their designated multi-state areas and convened periodic virtual meetings to explain the ATE program and highlight ATE projects and resources.

External Evaluator Dr. Blake Urbach reported in her *Year Four Evaluation Report – September 2025* that the Regional Network Chairs “logged hundreds of interactions with college presidents, statewide association representatives, and business owners in their efforts to recruit institutions and industries to become partners of their respective Regional Networks.”

Over the life of the project, 27 Regional Network meetings were held virtually. They attracted 682 attendees from 208 colleges in 30 states. In-person meetings were convened in Alabama, Louisiana, North Carolina, and Texas to address specific needs among community colleges there. Those meetings attracted a total of 147 attendees from 51 colleges in those four states.

Thought Leaders' Dialogues

As the project gained momentum, the leadership team decided it would be beneficial to convene virtual national dialogues with The League for Innovation in the Community College.



Dr. Rufus Glasper

Dr. Rufus Glasper, CEO of The League for Innovation in the Community College, said The League partnered with CCPI-STEM because its team was also concerned about community college leaders not prioritizing STEM education programs and were missing NSF grant opportunities for their institutions, faculty, and students.

Glasper said the goal was “to tell presidents that this is important now and it needs to be across the board and made available to all students.” He said “Thought Leadership” is the thread that connects The League and CCPI-STEM efforts to raise awareness about NSF and the ATE program resources to support innovative STEM technician programs. “Thought Leadership starts not with the faculty who have the fire in the belly [for ATE projects], but it also needs to have the institutions’ [leaders] saying ‘This is an important opportunity for us to step on board and figure out a way to make it happen.’”

The first Thought Leaders’ Dialogue was convened on May 11, 2023, to gain insights from community college leaders to catalyze engagement in STEM programs, particularly the NSF ATE program. The second Thought Leaders’ Dialogue was convened February 9, 2024 to discuss strengthening the capacity of small and rural community colleges. This dialogue responded to comments made during the first dialogue and participants’ survey responses that mentioned the unmet needs of rural community colleges. The third Thought Leaders’ Dialogue on January 23, 2025, focused on community college and industry workforce collaborations. The fourth Thought Leaders’ Dialogue, convened February 20, 2026, focused on artificial intelligence and workforce competencies. Video and audio recordings of the Thought Leaders’ Dialogues and reports from each Dialogue are posted at <http://ccpi-stem.org> and archived at ATE Central, <https://atecentral.net>.

CCPI-Casts

CCPI-STEM webcasts and podcasts began in January 2023. Dr. Elizabeth K. Hawthorne, CCPI-STEM Co-Principal Investigator, moderated each of the 22 *CCPI-Casts* that featured community college leaders sharing their insights on a wide range of topics related to CCPI-STEM’s goal of raising awareness of the NSF and ATE program opportunities. *CCPI-Casts* covered strategic partnerships with industry, how to build institutional capacity, model ATE programs, ATE mentoring projects, the CCPI-STEM Fellows program, and six episodes on artificial intelligence in STEM education at community colleges. Altogether, the 22 CCPI-Casts drew an audience of more than 2,000 individuals from across the U.S.



Dr. Elizabeth K. Hawthorne

CCPI-STEM Fellows

The CCPI-STEM Fellows program began in 2022, the second year of the project, with Dr. Ashok Agrawal serving as CCPI-STEM Fellows Coordinator. He is a former NSF ATE program officer, former Vice President for Academic Affairs at St. Louis Community College, and Managing Director for Professional Services and Director of External Affairs at the American Society for Engineering Education (ASEE). He drew on these vast experiences in selecting the CCPI-STEM Fellows, pairing as many of them as possible with Mentors, and guiding them during their two-year commitments to CCPI-STEM.

During his presentation, Agrawal called the 23 Fellows selected in four cohorts “truly shining stars.” He noted that they have fulfilled the CCPI-STEM goal of supporting STEM education programs at their institutions and serving as ATE ambassadors who encourage people to strengthen the STEM technical workforce. He told the Fellows that he hoped their experiences would influence how they developed STEM programs and supported faculty as they moved into leadership roles in the future.

Co-Principal Investigator George Boggs, who attended the meeting virtually, said, “The Fellows program has been a great success.” Boggs is Superintendent Emeritus of Palomar College and President and CEO Emeritus of the American Association of Community Colleges.



Dr. Ashok Agrawal

CCPI-STEM Fellows Share Their Reflections on Their Fellowship Experiences

In response to Agrawal's presentation and during a panel discussion, several Fellows talked about what they gained from their CCPI-STEM Fellowship experiences.

Elizabeth Ann Gonzalez, biology faculty at South Texas College, was recently awarded an Innovation in Two-Year College STEM Education program grant from NSF. She explained that seeing ATE project posters at the ATE PI Conference she attended as a CCPI-STEM Fellow informed the grant proposal she and a colleague wrote. The posters provided a snapshot of the degree programs that faculty built with their ATE grants. She said it was also extremely helpful to talk with the ATE PIs who shared their insights and offered advice that helped her write the proposal for the Scientific Engagement and Access through Course-Based Research and Innovation in STEM Participation project, which was awarded a \$499,392 grant in 2026.

Laurel Carpenter, Department Chair and Professor of Environmental Sciences at Holyoke Community College in Massachusetts, became a Co-Principal Investigator on an NSF Scholarships in Science, Technology, Engineering and Mathematics program grant after beginning her CCPI-STEM Fellowship in 2023. At that time, she was just starting her doctoral program. "This program has really launched my Ph.D. experience... if it wasn't for the connection between me and my mentor, I don't think I would be exactly where I am right now," Carpenter said. She praised her CCPI-STEM Mentor Debra Bragg for pushing her to be "a theoretical thinker." In 2026 Carpenter was selected for a fellowship with the Environmental and Natural Resource Technology (EARTH) Center, an ATE center at Central Carolina Community College that focuses on environmental technology education. Through CCPI-STEM, Chappell said she gained "a great organic network."



Laurel Carpenter

Peter Dettmer, Dean of Manufacturing, Apprenticeship, Technology & Transportation Division at Blackhawk Technical College in Wisconsin, said the positive experiences he had through CCPI-STEM and with his colleagues on a Tier 1 ATE grant have encouraged them to prepare for a larger ATE grant.

Danny Darden, Department Chair and Associate Professor of Computer and Information Technology at Kilgore College in Texas, explained that an ATE grant has helped him and colleagues explore why many students do not seek industry certifications. The team has restructured the curriculum based on what they have learned during the project. From MentorConnect, which helped the Kilgore faculty team develop its ATE grant proposal, and the encouraging people he has met at HI-TEC and the ATE Principal Investigators' conferences, Darden said he has learned that "ATE is an ecosystem" of people and professional networks. As a result of what he has learned through MentorConnect, as a Co-Principal Investigator, and as a CCPI-STEM Fellow, Darden is writing his doctoral dissertation about industry people who become technical educators.



Danny Darden

eugene I.d. mahmoud, Professor of Physics Engineering and Engineering Tech and Co-Department Chair of the Physics and Engineering Department at Mt. San Antonio College in California, was a Co-Principal Investigator of an ATE grant prior to his CCPI-STEM Fellowship. He is currently preparing a new NSF grant proposal. He said both the ATE grant and CCPI-STEM Fellowship were positive experiences. He praised the ATE program for giving community college instructors the opportunity to obtain mentoring, do research, and develop innovative programs. He said the CCPI-STEM Fellowship helped him start his doctoral degree work and become "future-facing—to have a vision. ... For me it was a great opportunity and it was really the first time I thought about leadership kind of as a part of my path forward." In 2026, mahmoud won the American Society of Engineering Education's 2026 Two-Year College Teaching Award in the Pacific Southwest section. The award recognizes mahmoud's sustained excellence in teaching and his commitment to student success at Mt. San Antonio College. He has also led the Engineering Liaison Council that focuses on improving engineering technology students' career pathways throughout California.



eugene I.d. mahmoud



Amanda Colosimo

Amanda Colosimo, Professor of Geology at Monroe Community College, said that becoming involved in CCPI-STEM introduced her to new ways of thinking about workforce development. She also met people who provided advice for the proposal that she and a colleague are submitting to NSF's Improving Undergraduate STEM Education program. She noted the stipend CCPI-STEM provided over two years has made it possible for her to pursue her doctoral degree and continue working at the New York community college where she now serves as the faculty union president. "Thank you for this opportunity. It's really been a great adventure," Colosimo said.

NSF ATE Modules

Shane Kirby, CCPI-STEM Curriculum Developer, provided an overview of the NSF ATE Modules that he, Dr. Elizabeth Hawthorne, CCPI-STEM Co-Principal Investigator, and mention Dr. Angel Rodriguz, Senior Professor of Biological Science at Broward College created for use in graduate school programs and leadership institutes. The five modules titled *Overview for Leadership in Community College Grants*, *Introduction to Grant Strategy*, *The NSF ATE Program*, *Grant Partnerships*, and *The Grant Lifecycle and Tactical Deployment* were designed to teach current and aspiring community college leaders about NSF and the ATE program. Kirby pointed out that the modules include video excerpts from interviews with 10 community college presidents.

Kirby is Director of Advancement Partnerships at Columbus State Community College. His presentation included a brief summary of how the Columbus, Ohio, college has used ATE grants to strengthen its STEM technician education programs in partnership with an array of industry partners, to develop a grant-seeking culture among faculty, and to create collaborations with new programs with other Ohio community colleges.

He reported that the always-free NSF ATE modules would be moving to Canvas Free in Fall 2026 from a different online platform. CCPI-STEM leaders are also exploring options for adding the modules to the resource libraries of other ATE projects.

Kirby explained that he adapted the module curriculum for in-person delivery at the CCPI-STEM Southwest Regional Network Meeting in Louisiana in March 2025. Since then, the modules have been used at 10 other meetings. Kirby also adapted two of the modules for a podcast.

Dr. Vera Zdravkovich said the modules have helped prospective and new NSF ATE grantees avoid pitfalls. "Having materials that address the potential issues are really so important," she said, thanking Kirby and Hawthorne for their work.



Shane Kirby

CCPI-STEM Publications

CCPI-STEM published 18 *Presidents' Press* e-newsletters in addition to the four Thought Leaders' Dialogue reports described earlier in this report. The *Presidents' Press* reported on the Regional Network meetings, highlighted content from CCPI-casts, and featured articles about the Regional Network Directors, their experiences with the ATE grants, and their advice to prospective and new ATE grantees.

External Evaluator Dr. Blake Urbach noted that articles authored by the leadership team have appeared in national publications including *Community College Daily* and *Educational Considerations*.

Panel Reviews Two Regional Networks' In-Person Meetings

During a panel discussion, Dr. Jennifer Wimbish, Southwest Regional Network Chair, and Dr. Christina Hart, Southeast Regional Network Coordinator, shared the key things they learned from the community colleges that participated in their CCPI-STEM service areas.

Wimbish said she learned that Texas, Oklahoma, and Louisiana, the three states in her Regional Network, each structured their statewide systems differently. This required her to tailor her outreach to every community college president in those states to build their understanding of what NSF ATE grants can do for their students, institutions, and regional economic development efforts. She noted that some urban districts in Texas have been awarded multiple ATE grants while other Texas colleges had never applied for NSF grants.



Dr. Christina Hart (left) and Dr. Jennifer Wimbish

To the leaders of rural colleges where faculty and staff had no experience with NSF grants, she encouraged collaborations with other community colleges with grants offices and faculty that had experience leading ATE grants.

In 2025 Wimbish and Ellen Willis, Coordinator of the Southwest Regional Network, organized an in-person CCPI-STEM Regional meeting in Louisiana for representatives of all of the state's community colleges to learn more about NSF and the ATE program. Throughout that meeting Wimbish encouraged the administrators, faculty, and staff members present to work collaboratively with multiple colleges to develop grant proposals and institutional systems for obtaining and managing grants. "You have to structure for success," she said.

Hart said she was struck by the many colleges in the six-state Southeast Regional Network where neither administrators nor faculty considered the possibility of NSF ATE grants as a source of funds to enhance their STEM technical workforce programs. She credited Dr. Edward Massey, Southeast Regional Director, with encouraging college presidents to "to think bigger."

She reported the in-person meetings that Massey and she convened in Alabama and North Carolina made community college educators in those states more aware of the ATE program and encouraged multi-college collaborations to develop grant proposals to address regional workforce needs.

Both Wimbish and Hart said the success of the four in-person meetings (the Southwest Regional Network convened a meeting on AI in Texas) made them wish they had convened more in-person meetings earlier in the project rather than relying on Zoom meetings, which was the usual way the CCPI-STEM Regional Networks met with college personnel.

McCrary: Seize Opportunities Amid AI Challenges

Dr. Victor McCrary, Vice Provost for National Security Innovation at The Catholic University of America, talked about the challenges and opportunities for STEM and artificial intelligence (AI) education in higher education.

He urged the community college educators to think of their institutions as businesses and find the niche they can serve. He asked: What are the critical success factors that align to the organization? What are organizational key results?

He urged the educators to develop playbooks to address particular challenges or audiences, such as employers' workforce needs.

He sees the priorities in 2026 as rebuilding demand, accelerating completion, aligning to opportunity, modernizing the operating model, and proving the value of credentials.



Dr. Victor McCrary

He thinks the main focus of community colleges should be workforce development: “Companies want students now. They don’t care about letters after their names,” he said, suggesting that community college leaders should be spending 60% of their time off campus talking to employers about what they need.

As for AI, he said community colleges need to teach people how to do AI use cases, which utilize AI to solve real problems, as well as technical aspects of how to use AI. “If you don’t know how to use AI, you are not going to have a job,” he predicted.

College administrators and faculty also need to consider what majors are no longer going to be viable because of AI, and what businesses in the college’s service region will be affected because of AI. He urged college leaders to “think about the pro formas for the work you do” and run through different scenarios for the impact of AI.

Sustainability

In the anonymous electronic survey administered at the end of the meeting, participants shared suggestions for the Fellows program, Modules, and CCPI-Casts to be continued by national organizations such as The League for Innovation in the Community College, the Association of Community College Trustees, or other ATE projects.

Attendees and Their CCPI-STEM Role

Dr. Ashok Agrawal, Fellows Coordinator
Jason Boehm, Fellow
Dr. George Boggs, Co-Principal Investigator *
Laurel Carpenter, Fellow
Amanda Colosimo, Fellow
Danny Darden, Fellow
Peter Dettmer, Fellow
Dr. Charlene Dukes, Co-Principal Investigator
June Fordham, Coordinator
Dr. Allison Foster, Fellow
Dr. Rufus Glasper, National Advisory Board Member,
CEO of The League for Innovation in the Community
College, CCPI-STEM Partner
Elizabeth Ann Gonzalez, Fellow
Dr. Christina Hart, Southeast Regional
Network Coordinator
Dr. Elizabeth Hawthorne, Co-Principal Investigator
Dr. Corby Hovis, NSF Program Director
Curtis Ivory, Fellow
Steve Jurch, Associate VP of the Association of
Community College Trustees, a CCPI-STEM Partner
Shane Kirby, Curriculum Developer

Mark Lawrence, National Advisory Board Member,
Founder and Managing Partner of Inncuvate,
a CCPI-STEM Partner
Fran Melvin, Project Manager
eugene l.d. Mahmoud, Fellow
Madeline Patton, Writer
Qurat-UL-Ann Mirza, Fellow
Srikantan “Tan” Moorthy, Advisory Board Member,
COO and Member of the Board at Revature,
a CCPI-STEM Partner
Valorie Piper, Fellow
Dr. Diane Rhodes, Fellow
Dr. Calvin Stansbury, Principal Investigator,
Dean of Science, Technology, Engineering,
and Math, Prince George’s Community College,
CCPI-STEM Host Institution
Mitchell Sweet, Fellow
Dr. Blake Urbach, External Evaluator
Dr. Jennifer Wimbish, Southwest
Regional Network Chair
Ellen Willis, Southwest Regional Network Coordinator
Lina Woo, Pacific Regional Network Coordinator
Dr. Vera Zdravkovich, Co-Principal Investigator

* Attended Virtually



eugene l.d mahmoud, CCPI-STEM Fellow, talks with Dr. Calvin Stansbury, CCPI-STEM Principal Investigator, between presentations at the CCPI-STEM Lessons Learned and Future Planning meeting. Throughout the day, CCPI-STEM Fellows had the opportunity to learn from the CCPI-STEM Leadership Team and staff during presentations and informal conversations.

