FIPSE-SP Program
FY 2025 Awards: Advancing the Understanding Of and Use of Artificial Intelligence (AI) Technology in Postsecondary Education

PR Award	Applicant	State	Award Amount	Abstract Page
P116J251015	Atenas University Dr. Maria Luisa Hernandez	PR	$2,018,800	2
P116J251426	Board of Regents, NSHE obo Desert Research Institute	NV	$2,713,292	3
P116J250966	Central Georgia Technical College	GA	$3,990,000	4
P116J250356	Cochise County Community College District	AZ	$1,876,381	5
P116J251505	Columbia State Community College	TN	$2,021,376	6
P116J250676	Dallas College	TX	$3,386,498	7
P116J250806	Educational Testing Service / ETS Research Institute	NJ	$3,999,998	8
P116J251433	Hillsborough Community College	FL	$1,293,344	9
P116J251837	Howard University	DC	$3,999,139	10
P116J251308	Idaho State Board of Education	ID	$4,000,000	11
P116J250280	San Jose State University Research Foundation	CA	$2,373,866	12
P116J251438	Savannah State University	GA	$3,882,918	13
P116J250972	Southern West Virginia Community and Technical College	WV	$1,842,418	14
P116J250071	Temple University - Of The Commonwealth System of Higher Edu	PA	$1,880,735	15
P116J251382	The University of Texas at Dallas	TX	$4,000,000	16
P116J250351	University of Louisiana at Lafayette	LA	$1,427,635	17
P116J250647	University of North Carolina at Chapel Hill	NC	$3,669,980	18
P116J250669	Wright State University (U)	OH	$2,500,000	19
Total			**$50,876,380**	

Abstract

Atenas University Dr. María Luisa Hernández (AUDMLH), a private nonprofit postsecondary institution in Manatí, Puerto Rico, proposes AI-IMPACT: Artificial Intelligence for Innovation, Mastery, Pedagogy, Access, Compliance, and Teaching-and-Learning project. With no partner entities, the project advances national priorities under Section 744(c)(2) by expanding the understanding and responsible use of Artificial Intelligence (AI) in postsecondary education, strengthening AI literacy, ethical implementation, instructional quality, and educator preparation.

AI-IMPACT addresses Absolute Priority 1 by enhancing instruction and student success through intelligent tutoring systems, predictive analytics, adaptive learning tools, Watermark's AI-enabled ACT Toolpack, AI-driven advising, and student-facing AI literacy development. It also addresses Absolute Priority 2, expanding foundational exposure to AI and computer science through stackable microcredentials, AI literacy modules, and a Faculty AI Certification Program serving educators, preservice teachers, and rural learners. The project targets low-income and rural postsecondary students, faculty across academic divisions, academic support staff, educator-preparation participants, and rural community learners.

The project includes six major activities: (1) establishing an institution-wide AI Governance Framework; (2) deploying AI tutoring systems, chatbots, adaptive learning tools, and predictive analytics; (3) integrating AI literacy and misinformation-detection training into courses; (4) launching a multi-tier Educator AI Development Model and AI/CS microcredentials; (5) expanding AI-enabled advising and 24/7 learning and wellness support; and (6) implementing a comprehensive evaluation plan and Replication Toolkit. These activities collectively advance five overarching goals: (1) building institutional capacity for ethical, secure, and scalable AI implementation; (2) transforming teaching and learning through AI literacy and responsible integration; (3) improving student success through AI-enhanced instruction and predictive analytics; (4) expanding access to AI and computer science skills for future educators and rural students; and (5)establishing a sustainable, replicable model for responsible AI adoption in postsecondary education.

Anticipated outcomes include: establishment of an AI Governance Framework with 100% institutional compliance by 2027; completion of ethical AI training by at least 90% of participating personnel by 2028; demonstrated AI literacy and instructional proficiency among 80% of full-time faculty by 2029; improved AI literacy for 65% of students enrolled in AI-integrated courses by 2029; increased academic success, engagement, or competency attainment for 70% of students in AI-supported courses by 2030; integration of predictive analytics into 90% of advising interventions by 2028; completion of AI/CS microcredentials by a minimum of 100 participants by 2029; and delivery of quarterly and annual evaluation reports and a comprehensive replication toolkit by 2030. Collectively, these results strengthen institutional capacity, promote equity in AI readiness, and establish a sustainable, replicable model for responsible AI adoption in postsecondary education.

ABSTRACT

1. **Lead Applicant Institution:** Board of Regents, NSHE obo Desert Research Institute
2. **Partner Entities:** University of Nevada, Reno – Institution of Higher Education (IHE)
3. **Project Title:** Advancing AI and Computer Science Education for K-12 Preservice and Inservice Educators
4. **Area of National Need:** Area of National Need #1
5. **Absolute Priority Addressed:** Absolute Priority #2, specifically addressing the lettered sub-priorities through the following mechanisms, we: (A) expand access to Artificial Intelligence (AI) and computer science credentials for Nevada's rural preservice and inservice teachers through virtual learning pathways that lead to a State of Nevada *Grades K–12 Introductory Computer Science* Education License Endorsement; and an industry-recognized certification in *AI and Computer Science Integrated Instruction*; (B) embed AI and computer science competencies into preservice preparation and inservice professional development through an internship/fellowship network and institutionally integrated professional learning pathways; and (E) Develop comprehensive AI and computer science teaching and learning resources, including standards-aligned STEM Kits and associated training modules, to provide teacher preparation programs with sustained support. This project fulfills Absolute Priority 2 by building a nationally scalable AI and computer science teaching and learning ecosystem to ensure teachers and students have the foundational exposure needed to advance our nation in an AI-driven future.
6. **Competitive Preference Priority Addressed:** N/A
7. **Target Population:** Undergraduate Preservice Teachers; K-12 Inservice Teachers
8. **Proposed Activities:** This project will build an integrated Artificial Intelligence (AI) and computer science teaching and learning ecosystem in Nevada that supports preservice teacher preparation and inservice teacher professional learning pathways. Core activities include developing a preservice/inservice teacher internship/fellowship network, AI and computer science K–12 STEM Kits, and multimodal teacher professional development pathways. Interns and Fellows will receive training and applied learning opportunities. STEM Kits deliver curriculum, materials, and paired training modules that enhance teachers' capacity to implement AI and computer science instruction. Professional development offers both theoretical and applied learning pathways, resulting in (1) a State of Nevada K–12 licensure endorsement and/or (2) an industry-recognized certification, allowing teachers to pursue one or both pathways based on their professional goals. These integrated activities are designed to reinforce and build upon one another through applied learning and feedback cycles, creating a scalable framework that prepares teachers to effectively use AI tools and teach their foundational concepts. This addresses a critical national need by developing sustained pathways that expand the number of teachers prepared to deliver high-quality AI and computer science instruction.
9. **Anticipated Results:** Over the grant timeframe, this will impact 996 teachers and 42,600 K-12 students in Nevada through AI and computer science education interventions. Outputs include: 60 K-12 reusable AI and computer science STEM Kits; 2 virtual professional learning pathways resulting in industry-recognized credentials; 48 in-person teacher professional development trainings; 3 Intern/Fellow cohorts resulting in 90 preservice and inservice teachers increasing instructional competency through experiential learning; and 1 statewide community of practice providing integrated supports and opportunities for continued impact. These resources will have an annual post-grant impact of up to 22,000 K-12 students and 240 teachers, sustaining a pipeline of AI and computer science informed teachers and learners.

ABSTRACT

1. Lead Applicant Institution: Central Georgia Technical College (CGTC)

2. Partner Entities: Worksource Georgia

3. Project Title: *Strengthening Technical Education Programs through Artificial Intelligence (STEP-AI)*

4. Area of National Need: Advancing the Understanding and Use of Artificial Intelligence in Education

5. Absolute Priorities Addressed:

Absolute Priority 1 - Generative AI will be used to provide high-quality instructional resources, tutoring, advising, and college and career navigation to improve educational outcomes

Absolute Priority 2 - Machine learning will be integrated into technician education pathways to prepare traditional and dually enrolled high school students to configure, troubleshoot, and repair modern automation and autonomous systems that define Industry 4.0

6. Competitive Preference Priority Addressed: N/A

7. Target Population: Students & Faculty

8. Proposed Activities:

Strengthening Technical Education Programs through Artificial Intelligence (STEP-AI) will advance the understanding and use of Artificial Intelligence in education through a two-pronged approach: expanding the use of generative AI to enhance tutoring, advising, and college/career navigation for undergraduate students (Absolute Priority 1), and integrating machine learning into technician education pathways to prepare traditional and dually enrolled high school students for the converging technologies that define Industry 4.0 (Absolute Priority 2). The integration of this transformative technology will be bolstered by faculty professional development across all programs, with instructors in the manufacturing sector securing professional level certifications in AI and robotics from internationally recognized organizations.

9. Anticipated Results:

By December 2027, CGTC will certify at least eight faculty members to deliver FANUC and SACA technician training and complete Industry 4.0 aligned curricular revisions. Over the next four years, the project will increase manufacturing program enrollment by 12.5% and credentials awarded by 15%. At least 85% of full time faculty will complete professional development in online course design and AI enhanced engagement, and AI driven learning activities will be added to at least five classes each year. Student use of AI supported academic services will grow by 50% annually, while overall retention will rise by at least 2% and online course success rates by 1% annually over baseline.

ABSTRACT

Grant Proposal for the Fund for the Improvement of Postsecondary Education Special Projects

1. Lead Applicant Institution: Cochise County Community College District

2. Partner Entities: Regional K-12 School Districts (LEA – Taskforce); Sulphur Springs Valley Electric Cooperative (Industry – Advisory); Arizona Learning Mobility Collaborative (IHE Consortium – Alignment); Wyoming Survey & Analysis Center at the University of Wyoming (IHE – Evaluator).

3. Project Title: AI-Powered Success: Integrating AI Literacy and Ethical Digital Citizenship

4. Area of National Need: Advancing the Understanding and Use of Artificial Intelligence (AI) in Education

5. Absolute Priority Addressed: Absolute Priority 1: Advancing Artificial Intelligence to Improve Educational Outcomes of Postsecondary Students. This proposal addresses the priority by bridging the "AI Digital Divide" through an institution-wide AI literacy ecosystem that equips rural students, faculty, and staff with foundational competencies and ethical digital citizenship skills.

6. Competitive Preference Priority/ies Addressed: N/A

7. Target Population: The project serves approximately 4,000 learners in southeastern Arizona (including first-generation, military-connected, and low-income students), K-12 districts, and industry partners. Instructional modules, microcredential frameworks, and training guides will be released as Open Educational Resources (OER), providing a scalable blueprint for rural colleges nationwide lacking high-quality AI resources.

8. Proposed Activities: Cochise College will implement four integrated initiatives: (1) the AI Innovation Studio for tiered faculty development; (2) Institution-Wide Capacity Building for staff workflow optimization; (3) a K-Industry Partnership Pipeline to co-design proficiency frameworks; and (4) Workforce Microcredentials aligned with the Arizona Learning Mobility Collaborative. Additionally, a qualified third-party evaluator will conduct a mixed-methods study based on the "Foundational vs. Scalable Skills" framework, comparing AI-augmented pilot courses against traditional sections (sample: 80 faculty, 50+ sections).

9. Anticipated Results: The project moves the College toward a coherent pedagogical framework for ethical, evidence-based AI integration. Quantitative data (retention, completion) will be triangulated with qualitative data from the AI-Augmented Critical Thinking Inventory (validated reliability target >0.75). Validated modules and guides released as OER will provide a scalable, low-infrastructure model for rural institutions nationwide.

Abstract

1. Lead Applicant Institution: Columbia State Community College

2. Partner Entities:
- General Motors
- Tractor Supply Company
- Lawrence County Chamber of Commerce
- Williamson, Inc. Economic Development
- Maury County Public Schools
- Williamson County Schools

3. Project Title: COMPASS - Community College Operational Model for Promoting AI Systems and Standards

4. Area of National Need: Advancing Artificial Intelligence to Improve Educational Outcomes of Postsecondary Students

5. Absolute Priority Addressed: Absolute Priority 1: Advancing Artificial Intelligence to Improve Educational Outcomes of Postsecondary Students. This project establishes a comprehensive AI Division with governance structures, faculty development programs, and student-focused initiatives that systematically integrate AI tools into instruction and student support services while measuring resulting learning gains.

6. Target Population: The project will serve more than 50+ faculty members, student support staff participating in pilot or training activities, and approximately 1,700–1,800 students annually across Columbia State's five campuses, including approximately 1,200 first-year students enrolled in the College Success course and an additional 500 students engaged through AI literacy workshops. Beginning in Year 3, the project will also reach dual enrollment students in the seven high schools served by the RPED program in Maury County.

7. Proposed Activities: The four-year project will: (1) establish an AI Division with an institutional governance framework and ethical-use policies; (2) deliver AI literacy training, support faculty-led pilot projects, and launch an AI Learning Community; (3) integrate AI tools into instruction and student support services, deliver workshops for non-first-year students, and implement a dedicated AI literacy module in the College Success course; and (4) publish an AI Integration & Ethics Toolkit, conduct K–12 outreach to regional school districts beginning in Year 3, and develop a sustainability plan that identifies feasible institutional and external funding options. Building upon Columbia State's existing FIPSE Rural Postsecondary and Economic Development grant ($1,571,255), the AI Division will strengthen rural workforce preparation by embedding essential AI literacy within both college and dual-enrollment pathways.

8. Anticipated Results: The project will result in: (1) a fully operational AI Division with approved governance and ethical-use frameworks; (2) at least 50 faculty trained in AI literacy, at least 10 completed and evaluated pilot projects, and 5 published case studies; (3) increased student exposure to AI tools, demonstrated pre/post gains in AI literacy and AI use efficacy, and widespread integration of AI literacy in the first-year curriculum; and (4) a published toolkit, at least three new employer or educational partnerships, and a completed sustainability plan identifying realistic institutional and external funding strategies, including a $25,000 annual investment in professional development beginning in Year 5. These outcomes will improve educational practice, strengthen student learning, and advance the goals of America's AI Action Plan by expanding the nation's AI-ready talent pipeline.

9. Budget Request: $2,021,376 over four years.

DALLAS COLLEGE

Project Abstract Summary
AI-Enabled Teaching and Learning Initiative

Area of National Need:
This project addresses the urgent need for postsecondary institutions to prepare students and faculty for an AI-driven economy. Community college students and faculty often lack exposure to artificial intelligence concepts and tools, creating gaps in workforce readiness and instructional quality. The initiative aligns with **Absolute Priority 1** by advancing responsible AI integration into teaching and learning to improve educational outcomes and strengthen alignment with emerging labor market demands.

Project Overview and Priorities
Dallas College proposes a comprehensive, scalable model for AI adoption that combines faculty development, curriculum redesign, microcredential integration, and industry validation. The project meets competitive priorities by embedding high-impact strategies and creating replicable frameworks for nationwide dissemination.

Partner Entities
- Dallas College (Institution of Higher Education) – Lead applicant
- WorkCred (Nonprofit organization affiliated with ANSI) – Workforce alignment and credential validation; Additional partners include regional employers engaged through WorkCred-led AI Sprints.

Target Population
Faculty across multiple disciplines, instructional designers, and students enrolled in general education, engineering, technology, mathematics, science, and workforce programs.

Proposed Activities (4-Year Performance Period)
- Establish a Community of Practice model for faculty adoption of AI, launching multi-cohort training and curriculum redesign cycles.
- Conduct AI Sprints with WorkCred to validate competencies and embed industry-aligned microcredentials in courses.
- Pilot AI-enabled instructional tools, tutoring systems, and career planning platforms to enhance student academic and engagement success.
- Develop and disseminate implementation toolkits, curriculum modules, and microcredential frameworks for replication nationwide.

Anticipated Results
- Faculty gain advanced competencies in AI-informed pedagogy and produce shared teaching resources.
- Students receive embedded AI literacy instruction, improved academic support, and workforce-aligned credentials.
- Increased student learning, achievement, persistence, and completion in redesigned programs.
- Creation of a sustainable institutional framework for continuous AI integration and national dissemination through webinars, toolkits, and partnerships.

Teaching and Learning with AI: Transforming Postsecondary Education with Scenario-Based Tasks

This project addresses the first area of national need – advancing the understanding of and use of Artificial Intelligence (AI) technology in postsecondary education. The project meets Absolute Priority 1: Advancing Artificial Intelligence to Improve Educational Outcomes of Postsecondary Students, by using scenario-based learning and assessment (SBLA) to improve postsecondary instructional and assessment practices and students' content area learning, higher-order thinking, and AI literacy. The project will be carried out by ETS in partnership with the University of Memphis (UM) and Georgia State University (GSU). The target population is postsecondary instructors and students across various disciplines from two public universities (UM, GSU) and Northwestern Michigan College (NMC), a community college. The project includes four years of iterative implementation, repeated testing, and continuous improvement of SBLAs, instructor dashboards, and professional development (PD) materials. In Year 1, we engage instructors in a co-design process to create SBLAs, facilitated by generative AI (GenAI). In Year 2, we conduct cognitive labs to inform improvements of the SBLAs. In Years 2-3, we scale up the empirical data collection to evaluate and improve the usability, feasibility, and the impact of the SBLAs on instruction and learning (content learning, higher order thinking, AI literacy). In Years 3-4, we will monitor existing instructors' continued use of SBLAs to make further improvements, and disseminate SBLAs to more instructors outside of the project team. Upon completion, we aim to have 20 SBLAs used by over 2,000 students. We expect SBLAs to have moderate to large, positive effects on instructors' teaching and assessment practice, student learning, higher-order thinking, and AI literacy. The Center for Research in Educational Policy (CREP) will serve as the independent evaluator to evaluate project progress and document project activities.

ABSTRACT

Hillsborough College (HCC) serves approximately 46,000 students annually across five campuses in Hillsborough County, including over 8,000 dual-enrolled students—the second largest enrollment in the state. HCC offers an Associate in Science (AS) degree in Artificial Intelligence (AI), addressing a gap where most AI education is concentrated at four-year institutions.

The **AI-PREP4WORK: AI Innovation Center - Preparing Students and Educators for AI-Enabled Workplaces** is a four-year initiative designed to provide coordinated AI learning experiences for dual-enrolled students, College Reach Out Program (CROP) participants in grades 6–12, K12 educators, and post-secondary faculty. It responds to Executive Order 14277 by expanding early AI exposure, strengthening educator preparation, and connecting AI learning to real-world applications (AI.gov, 2025). The initiative aligns with Jobs for the Future's AI-Ready Workforce Framework by preparing students to work with AI as informed decision-makers rather than competing with automated tools (Jobs for the Future, 2024).

To support these goals, HCC will establish an **AI Innovation Center** at the Dale Mabry campus, featuring advanced computing equipment and spaces for project-based learning. The Center will also host outreach for secondary students and provide professional development for HCC faculty and K12 educators.

In partnership with partners CurioXR and Rapid7, AI-PREP4WORK equips students across all majors with AI literacy skills to maintain professional authority over AI tools. As AI becomes embedded in industries such as construction, accounting, and cybersecurity, graduates must evaluate AI outputs, identify limitations, and justify decisions using professional standards (Ruiz-Viruél et al., 2024; Dai, 2024; Digital Promise, 2024).

Outcomes include (i) increasing A.S. AI degree enrollment from 65 to 300 with infrastructure and equipment for advanced computing exercises; (ii) equipping 150 non-AI A.S. degree seekers with competencies to identify AI errors (Digital Promise, 2024; Chiu et al., 2024; Achieving the Dream, 2025); (iii) introducing 270 secondary students to AI Literacy and a virtual AI tutor aligned with the AI for K12 Youth (AI4K12, 2025) framework through camps and workshops; (iv) providing professional development to 100 educators to include AI tools in classroom instruction (Touretzky et al., 2023; Létourneau et al., 2025).

AI-PREP4WORK will be a replicable model for two-year colleges, teaching students to use their AI skills as a complementary tool rather than a replacement for human expertise.

Integration of AI Literacy and AI-enhanced Pedagogical Approaches and Tools into Post-secondary Education: A Collaborative Initiative Between Howard University and Bowie State University[1]

FIPSE Special Projects Program Absolute Priority 1: Advancing Artificial Intelligence to Improve Educational Outcomes of Postsecondary Students
Lead Applicant: Howard University, 2400 Sixth Street NW, Washington, DC 20059
Partner Institution: Bowie State University, 14000 Jericho Park Road, Bowie, MD 20715

This collaborative initiative between Howard University (HU) and Bowie State University (BSU) as sub-awardee addresses Absolute Priority 1 of the FIPSE Special Projects Program by advancing artificial intelligence literacy to improve educational outcomes for post-secondary students. The project responds to urgent needs identified in Executive Orders 14179 and 14277 to prepare students and faculty for an AI-integrated society while maintaining academic integrity and promoting ethical AI use across business, humanities, social sciences, and natural sciences, with specific focus on discipline-specific guidance and critical evaluation skills for detecting AI-generated misinformation. The project serves approximately 400 undergraduate and graduate students and 50 faculty members annually across both institutions, with expansion to 40 secondary school teachers in collaboration with a Local Educational Agency (LEA) partner in years 3-4. Target populations include faculty and students in humanities, social sciences, natural sciences, business, and health science programs, with particular focus on first-generation college students and students from underrepresented minorities at these two HBCUs. HU focuses on the humanities, social sciences, and natural sciences, while BSU focuses on Business and Health Science. Both institutions exchange expertise and infrastructure. The Lead PI and Co-PIs have demonstrated expertise through previously successful NSF-funded projects on infusing Data Science across disciplines. Over 48 months, HU and BSU will: (1) develop strong AI literacy foundations addressing capabilities, limitations, and ethical use; (2) improve student learning using AI tools while maintaining academic integrity; (3) advance faculty teaching effectiveness through sustained professional development; (4) advance high school teachers' effectiveness by providing discipline-specific AI competencies. The project leverages BSU's proven Faculty Learning Community (FLC) model, which HU adapts to create interconnected FLCs across both institutions. Three large-scale collaborative workshops annually bring faculty and students together, each featuring an AI Use Competition showcasing innovative AI applications. Secondary schools participate in competitions starting Year 3.Key objectives include: a) development and implementation of AI literacy modules covering fundamental concepts, responsible AI usage, detection of AI misinformation, discipline-specific applications, and AI in entrepreneurship, with digital certificates leading to badges; b) establishment of interconnected FLCs at Howard leveraging BSU's proven model, with quarterly meetings and three annual collaborative workshops featuring AI Use Competitions expanding to secondary schools in Years 3-4; c) creation of frameworks for responsible AI use guided by APA and MLA citation standards; d) case competitions during tri-annual workshops; and e) extension to secondary education through summer professional development with LEA partnership. Anticipated results include measurable AI literacy improvements, enhanced student learning outcomes engagement, passing rates, retention, graduation), increased faculty confidence in AI-enhanced pedagogy, and sustainable replicable models for HBCUs and other institutions nationally.

[1] This proposal utilized Claude AI (Anthropic, 2024) for writing assistance, document formatting, and editorial support. All intellectual content, ideas, methodologies, and budget decisions are those of Dr. LaTanya Brown-Robertson and the Howard University/Bowie State University project team.

ABSTRACT

Accelerate Idaho: An AI-Powered Future for Teaching and Learning

Accelerate Idaho responds to President Trump's Executive Orders on AI education by establishing comprehensive AI literacy infrastructure across Idaho's eight public postsecondary institutions. The project embeds AI literacy into required General Education courses, ensuring all 90,000 students served annually—including 11,000 dual-enrolled high school students—develop competencies in responsible AI use, verification of AI-generated content, and detection of misinformation.

Population Served: Idaho's postsecondary students, with priority for rural learners, Pell-eligible students, first-generation students, and dual-enrolled high school students. Special emphasis supports high-demand fields aligned with national priorities: nuclear energy, critical materials, engineering, healthcare, and education.

Expected Outcomes: The project targets measurable improvements in course completion rates (5-10% increase), student AI literacy proficiency (80%), and faculty confidence in AI integration (90%). Idaho will produce openly licensed Canvas modules, Pressbooks educational resources, and an Implementation Playbook for rural state replication. This human-centric model ensures post-grant AI literacy costs below $10 per student annually—compared to $50-150 for vendor-dependent approaches—positioning Idaho students for high-wage AI occupations while maintaining fiscal responsibility.

Primary Activities: The State Board of Education coordinates statewide implementation through a Director of Digital Learning and AI. The AI Catalyst Network scales faculty-led professional development and openly licensed course redesign. Annual Digital Learning Institutes provide cross-institutional collaboration.

Subrecipient Activities: Campus Innovation Grants ($2.25M) fund context-appropriate AI projects including privacy-preserving local models, Idaho National Laboratory workforce partnerships, technical certificate pathways, and accessibility enhancements. Faculty microgrants support General Education redesign. AI Access Scholarships ensure equitable technology access.

Abstract

1. **Lead Applicant Institution:** San José State University Research Foundation
2. **Partner Entities:** Not Applicable
3. **Project Title**: AI is only as good as its users: Advancing students' informed use of AI in higher education
4. **Area of National Need:** Advancing the understanding and use of Artificial Intelligence (AI) in postsecondary education.
5. **Absolute Priority/ies Addressed:** The proposed project addresses Absolute Priority 1 (Absolute Priority 1: Advancing Artificial Intelligence to Improve Educational Outcomes of Postsecondary Students) by integrating AI literacy into teaching and learning practices at San José State University (SJSU) to improve the ability of undergraduate students to detect AI-generated deepfakes, disinformation or misinformation online (i.e., hallucinations) thereby building critical thinking skills to use AI responsibly.
6. **Competitive Preference Priority/ies Addressed:** Not applicable.
7. **Target Population:** Undergraduate students, Faculty
8. **Proposed Activities:** Produce curriculum that is aligned with evidence-based practices paired with innovation via Research Practice Partnership model and that is usable and feasible in university classes; Measure growth in student AI literacy, ability to recognize AI deepfakes and hallucinations, and responsible AI use using the Artificial Intelligence Literacy Scale and AI Literacy Measures; Measure growth in faculty instructor and graduate teaching assistant confidence and knowledge in teaching AI literacy, detecting AI deepfakes and hallucinations, and building prompt engineering skills for responsible AI use using instructor centered scale (Intelligent-TPACK); Develop professional development for instructors who can support their peers in implementing the curriculum in the College of Education and the College of Social Sciences; Create digital repository and train instructors to scale to entire San José State University campus by end of Year 4.
9. **Anticipated Results**: We anticipate that a total of 50-70 lower-division general education and upper-division disciplinary writing courses will participate, reaching 2,500-3,000 undergraduate students during the four-year project period. We expect to see growth in (a) instructor confidence and comfort in AI basics, detecting AI deepfakes and hallucinations, prompt engineering skills, and AI literacy according to pre- and post-test assessments, and (b) increases in student access to high-quality AI literacy, AI deepfakes and hallucination detection, and prompt engineering skills learning opportunities, indicated through evidence of faculty instructor and graduate teaching assistant implementation of all curricular components. We expect to see improvements during each project year for student confidence and ability to detect AI deepfakes and hallucinations and to improve prompt engineering skills.

Lead Applicant Institution: Savannah State University (SSU), a public Historically Black College and University (HBCU) and institution of higher education, serves as the lead applicant and anchor institution for the initiative.

Partner Entities: Key partners include the Savannah-Chatham County Public School System (SCCPSS), a Local Education Agency (LEA), and the Digital Flex Consortium, a nonprofit technology partner providing federated AI infrastructure, analytics, and embedded instructional coaching. SSU Faculty Leads across university gateway courses also contribute to project development and implementation.

Project Title
AI Teaching & Learning Collaborative: Transforming Teaching, Learning, and Educator Preparation with Artificial Intelligence

Area of National Need: The project addresses a critical national need to prepare K–12 educators, higher education faculty, and preservice teachers to use artificial intelligence (AI) responsibly, ethically, and effectively. As AI begins reshaping teaching and learning nationwide, districts facing persistent teacher shortages, rural communities, and underserved learners require targeted support to ensure equitable access to AI-enhanced instruction and improved literacy and academic outcomes.

Absolute Priority Addressed: The project addresses **Absolute Priority 1 (Instructional Improvement)** through AI-enabled personalized learning models, adaptive diagnostic tools, Science of Reading-aligned pathways, and embedded coaching to improve instruction and literacy outcomes. It also addresses **Absolute Priority 2 (Educator Preparation and Professional Learning)** through a statewide stackable micro-credentialing system that builds educator AI fluency, responsible-use competencies, and instructional capacity across P–20 systems.

Target Population: The initiative targets 5,000 educators and 50,000 students in the initial phase, scaling statewide to over 30,000 educators and 500,000 students. Additional populations include SSU faculty, preservice teachers, instructional coaches, and school administrators. Priority attention is given to historically underserved learners, including students with disabilities, English learners, rural youth, and students attending high-need districts affected by persistent teacher shortages.

Proposed Activities: The project will design and implement a three-tier AI micro-credentialing system for educators and leaders; deploy AI-enabled personalized literacy models in SCCPSS; and integrate Digital Flex's Accelerate and Elevate platforms to provide real-time analytics, predictive insights, and embedded instructional coaching. Activities also include strengthening AI integration across educator preparation and field-based experiences; coordinating professional learning and faculty development; and conducting baseline, formative, and summative evaluation. Deliverables include micro-credentials, implementation guides, evaluation tools, research publications, and a national Replication Toolkit supporting future adoption across states.

Anticipated Results: Anticipated outcomes include increased educator readiness for effective and ethical AI integration; measurable gains in adolescent literacy through responsive, AI-supported instruction; and enhanced data-informed decision-making across P–20 systems. The project will expand statewide educator capacity, strengthen the teacher preparation pipeline, and position Georgia as a national leader in responsible, evidence-based AI adoption in education.

Abstract
Southern West Virginia Community and Technical College AI Readiness & Capacity Initiative

Addressing: ***Critical need 1 Advancing AI in Post-secondary Education and Absolute Priority 1 and 2.***

Southern West Virginia Community and Technical College (Southern) serves a rural, high-need region of Appalachia characterized by low household income, limited educational attainment, and significant barriers to college persistence. With most students being first-generation, low-income, and balancing work or family responsibilities, Southern faces ongoing challenges in retention, completion, and access to consistent academic support. The **AI Readiness & Capacity Initiative** is a four-year, institution-wide effort to transform teaching, learning, and student services through responsible AI integration, ultimately improving educational quality and strengthening institutional capacity.

The project aims to enhance teaching and learning by embedding AI tools, AI-supported instructional practices, and AI-related content into high-impact academic programs such as Nursing, Allied Health, Business, Information Technology, and General Education. Faculty will participate in comprehensive professional development beginning with baseline AI literacy workshops, followed by discipline-specific training. By Year 3, Southern anticipates that at least 75% of faculty will be using AI-enabled strategies to deliver more personalized instruction, improve engagement, and enhance learning outcomes. The college will also develop new AI-focused academic offerings, such as an AI foundations course or certificate, to prepare students for an evolving workforce.

The initiative strengthens student support and institutional efficiency by implementing a 24/7 AI-powered student services chatbot, deploying a predictive early-alert analytics system, and piloting AI-assisted administrative tools. These innovations are designed to increase access to timely support, streamline operations, reduce staff workload, and improve overall responsiveness. The college expects these efforts to contribute to an increase of at least five percentage points in first-year student retention by the end of the grant period.

To ensure long-term, ethical adoption of AI, Southern will establish a college-wide AI Task Force, develop a comprehensive AI policy framework, and integrate AI expectations and training into ongoing professional development and new-hire orientation. Throughout the project, continuous improvement will be guided by structured evaluation activities, including baseline data collection, annual assessments, a formal midpoint evaluation in Year 3, and a summative evaluation in Year 4. These assessments will measure outcomes related to faculty AI adoption, student achievement, support service effectiveness, operational improvements, and overall institutional capacity.

By the conclusion of the initiative, Southern will have built a sustainable AI infrastructure, strengthened instructional quality, expanded student supports, and created a replicable model for rural community colleges seeking responsible AI integration. This project positions Southern as a regional leader in AI-driven educational innovation while expanding opportunity and improving outcomes for Appalachian learners and communities.

Project Title: Transforming Mathematics Teacher Preparation with AI: A Scalable, Multi-Agent Simulation for Iterative Instructional Rehearsal

Project Overview and Absolute Priority Alignment: This project addresses **Absolute Priority 1 (Advancing Artificial Intelligence to Improve Educational Outcomes of Postsecondary Students)**. Specifically, it responds to the priority's call to **(a) Support the integration of AI literacy skills** into teaching and learning practices. It designs and implements *iTeachSimulator*, a scalable, AI-driven 3D classroom simulation platform embedded into the teacher preparation curriculum at Temple University. While high-quality mathematics teachers are essential for the nation's STEM competitiveness, traditional teacher preparation programs face two critical barriers: (1) structural bottlenecks that limit high-quality clinical placements, and (2) a lack of authentic environments to cultivate the AI literacy required for the future workforce. To solve this, the project deploys a low-cost, AI-powered virtual classroom that utilizes autonomous multi-agent AI to provide Preservice Teachers (PSTs) with unlimited opportunities for instructional rehearsal. This approach simultaneously meets the priority's secondary goals of **personalizing learning (ii)** and **improving operational efficiency (iii)**. The platform integrates three scalable technologies to enhance teacher preparation:

1. **Customizable AI Virtual Environments:** Utilizing generative world modeling AI to instantly create diverse 3D classroom settings based on text prompts. This allows PSTs to "create with" AI, designing varied contexts (e.g., urban, rural) to personalize their training.
2. **Multi-Agent AI Students:** Deploying autonomous "student agents" driven by LLaMA 3 and fine-tuned on authentic classroom transcripts (e.g., NCTE and TalkMoves datasets). Unlike static avatars, these AI agents dynamically interact with PSTs, ask and answer questions, and demonstrate misconceptions and reasoning processes.
3. **Automated Feedback & TEPS Framework:** A closed-loop system analyzes multimodal cues (voice, discourse) to provide immediate feedback grounded in the "5 Practices for Orchestrating Mathematical Discussions" and TEPS and related rubrics.

Project Objectives and Activities: The project follows a 36-month implementation plan employing a Parallel Dual-Track model. The primary objectives are:

1. **Develop AI Literacy & Durable Skills:** Equip future teachers with the critical skills to engage, manage, and critique AI systems. By navigating simulations, PSTs learn to identify "hallucinations" and understand ethical implications (Priority 1.a).
2. **Enhance Pedagogical Content Knowledge:** Improve PSTs' ability to orchestrate deep mathematical discussions and assess student thinking through repeated "teach-feedback-reteach" cycles.
3. **Increase Clinical Capacity & Efficiency:** Provide a scalable supplement to field placements that allows programs to increase clinical hours without proportional administrative costs (Priority 1.b.iii).

Significance: This project offers a cost-effective solution to the "theory to practice gap" in post-secondary education. By enhancing human-based field experiences with AI-driven simulation, the project increases and expands practical opportunities while significantly reducing costs. It also makes high-quality clinical practice accessible to institutions with limited resources. The resulting open-access architecture will support the FIPSE goal of improving postsecondary instruction by producing a validated model for AI-augmented clinical practice.

PROJECT ABSTRACT

1. Lead Applicant Institution: The University of Texas at Dallas (IHE)

2. Partner Entities: Uplift Education (LEA)

3. Project Title: UTD/Uplift: Future Ready AI Collaborative

4. Area of National Need: 1) Advancing the understanding of and use of Artificial Intelligence (AI) technology in postsecondary education

5. Absolute Priority/ies Addressed: The project directly advances Absolute Priority 1: Advancing Artificial Intelligence to Improve Educational Outcomes of Postsecondary Students The project fulfills AP1(a) by integrating responsible Artificial Intelligence (AI) literacy first-year university coursework and undergraduate bridge programs, teaching postsecondary students how to use AI safely, evaluate AI outputs, and detect misinformation. The project fulfills AP1(b)(i) by using AI to deliver high-quality instructional resources, high-impact tutoring, and personalized college-and-career pathway advising to ensure students are college-ready. It fulfills AP1(b)(ii) by embedding AI-driven tools such as adaptive learning supports and data-informed tutoring into classrooms to personalize learning and improve academic outcomes. Finally, the project addresses AP1(b)(iii) by using AI to reduce administrative burden, strengthen teacher training, and improve services for multilingual learners and students with disabilities.

6. Competitive Preference Priority/ies Addressed: Not Applicable

7. Target Population: Faculty, administrative staff, and students

8. Proposed Activities: Project activities include co-developing AI literacy modules and case studies, delivering these materials in 10th–12th grade classrooms, and implementing AI-enabled instructional supports and tutoring. Four AI Lab Schools test and iterate successful strategies and will serve as hubs for educator professional development, coaching, and train-the-trainer capacity-building to support sustainable, responsible use of AI. The project will also integrate advising, learning management, and student information systems with assessment data to generate early-alert indicators, real-time performance dashboards, and seamless K–16 postsecondary transitions.

9. Anticipated Results: The project anticipates measurable gains in AI literacy, academic outcomes, and postsecondary readiness. All Uplift 10th- and 12th-grade students will complete AI literacy modules, with at least 80% achieving mastery aligned with UTD verification standards. More than 2,500 UTD and pipeline students will earn the AI Competency Certificate, and 1,200 high school students will earn industry-recognized AI credentials. AI-enhanced tutoring and differentiated instruction are expected to contribute to 5–20% gains in Algebra I and English I EOC performance across the four AI Lab Schools. By graduation, 80% of seniors will complete high-quality postsecondary plans, including higher completion rates among those participating in AI-supported advising cycles; alumni will demonstrate improved transition readiness and first-year academic stability. Educators and counselors will report increased confidence and capacity to integrate AI responsibly, with systemwide adoption of AI-supported instructional, advising, and decision-making tools by the end of the grant.

1. Lead Applicant Institution: University of Louisiana at Lafayette.

2. Partner Entities: Lafayette Parish School System (LEA).

3. Project Title: AI-Enhanced Teacher Preparation Pipeline (GYO → Residency)

4. Area of National Need: The project addresses the national need for *Expanding the understanding and use of Artificial Intelligence (AI) technology in education*.

5. Absolute Priority Addressed: Absolute Priority 2. The project addresses this priority by:
(b) embedding AI and computer science into the institution's general preservice teacher preparation programs, specifically for Early Childhood and Elementary majors.
(c) providing support for teacher preparation programs that are preparing future computer science educators (targeting elementary generalists as the foundational CS workforce).
(e) providing resources and support for the use of AI in teacher preparation programs through faculty development and the creation of custom AI tools.

6. Competitive Preference Priority/ Addressed: N/A

7. Target Population:
- **Primary:** Undergraduate Preservice Teachers (PSTs) in Early Childhood (PK-3) and Elementary Education (1-5) majors.
- **Secondary:** Teacher Preparation Program Faculty and High School students in the "Grow Your Own" (GYO) pre-educator pathway.

8. Proposed Activities:
- **Curriculum Mapping & Resource Creation:** Faculty will map courses to the Louisiana Aspiring Educator Rubric (LAER) and create high-quality instructional materials and custom generative AI tools aimed at improving instructional planning and feedback.
- **Vertical Curriculum Embedding:** Systematically embedding AI tools and AI literacy across the TPP sequence, from Freshman foundations courses through Senior Residency.
- **Computer Science Integration:** Embedding Computer Science (CS) and Computational Thinking (CT) modules into literacy and math methods courses.
- **Grow Your Own (GYO) Integration:** Integrating AI foundational modules into the Lafayette Parish School System GYO high school pathway to ensure early exposure for future teachers.

9. Anticipated Results:
- **Faculty Capacity:** 100% of the project team will design and pilot high-quality, LAER-aligned AI/CS instructional materials.
- **PST Self-Efficacy (AI):** 90% of PSTs will achieve a self-efficacy score of 4.0 or higher regarding their ability to use AI for instructional planning and academic feedback.
- **PST CS Readiness:** 90% of PSTs will achieve a score of 4.0 or higher on a self-report instrument measuring their confidence and skill to teach CS/CT concepts.
- **Pedagogical Growth:** PSTs will demonstrate improved Pedagogical Knowledge (PK) and Pedagogical Content Knowledge (PCK) through the use of AI-enhanced materials.

Integrating AI and Evidence-Based Practices to Enhance Postsecondary Special Educators' Preparation for Supporting Autistic Students (FIPSE-SP; ED-GRANTS-111225-001)

ABSTRACT

1. **Lead Applicant Institution:** University of North Carolina at Chapel Hill
2. **Partner Entities:** University of Buffalo, University of Illinois at Urbana-Champaign, University of Iowa, Consortium of IHE Implementers, and Consortium of SEA and LEA Implementers
3. **Project Title:** Integrating AI and Evidence-Based Practices to Enhance Postsecondary Special Educators' Preparation for Supporting Autistic Students
4. **Area of National Need:** Integration of AI-assisted professional development leading to teachers' implementation of evidence-based practices for autistic students
5. **Absolute Priority/ies Addressed:** 1) Advancing the understanding of and use of Artificial Intelligence (AI) technology in postsecondary education: i. Use AI technology to provide high-quality instructional resources…; ii. Integrate AI-driven tools into classrooms to personalize learning, improve student outcomes, and support differentiated instruction…; (iii) Utilize AI in the classroom and/or for school operation efficiency, including … improving instruction or services for students with disabilities.
6. **Competitive Preference Priority/ies Addressed:** N/A
7. **Target Population:** Postsecondary-preservice students (PSPS) in training to work with autistic students, Postsecondary-in-service teachers (PSIS) currently working with autistic students.
8. **Proposed Activities:** In this project, researchers will a) utilize AI to assist in the systematic review and meta-analysis of high quality intervention science literature leading to identification of evidence-based practices (EBPs); b) design and evaluate an AI-integrated application that will assist in formulating measurable student learning goals, precisely identifying EBPs that address student goal outcomes based on students' characteristics, abilities, and preference and assessing student progress; and c) embed and evaluate the AI-assisted application in teacher education programs for teachers preparing to work with autistic students, and d) embed and evaluate the AI-assisted application in SEA- and LEA-sponsored in-service training for teachers of autistic students.
9. **Anticipated Results:** By the end of this project, there will be a completely developed and thoroughly vetted AI-assisted application and methodology for PSE faculty to use in their preparation of preservice teachers and for in-service teachers to employ EBPs in their intervention and instruction of autistic students.

ED Abstract

1. **Lead Applicant Institution:** Wright State University
2. **Partner Entitites:** Kansas State University (IHE), University of Florida (IHE), Ohio Department of Higher Education (SEA), Dayton Public Schools (LEA)
3. **Project Title:** Strengthening American Competitiveness with AI Education
4. **Area of National Need:** #1 Advancing the Understanding and Use of AI in Postsecondary Education
5. **Absolute Priorities Addressed** Absolute Priority #2. We address all priorities under AP#2. Specifically our proposed activities directly target rural communities in Ohio and Kansas, new course development embeds AI literacy emphasis into general course curriculum in partnership with local and state-level education agencies, exposure to and training with AI tools for teachers and faculty, and overall providing resources to strength competitiveness in AI across K-12 and postsecondary education. See #8 and #9 below for details. In addition, we address all priorities of Absolute Priority #1.
6. **Competitive Preference Priority Addressed:** Not Applicable.
7. **Target Population:** Students, K-12 Teachers, Faculty
8. **Proposed Activities:** This project builds upon a foundation of established and successful K-12 and undergraduate education programs at WSU and KSU to: (a) develop hands-on, interactive, student-centered AI, Data Science, and Computer Science learning experiences and lessons through a co-development process with educators and disciplinary experts; (b) create new undergraduate and high school courses supporting the development of AI fluency using the developed curriculum utilizing a stackable course model providing flexibility and academic freedom; (c) integrate age-appropriate versions into K-12 outreach programs to ensure all students (including those from rural communities) experience frequent and ongoing quality AI, Data Science, and Computer Science instruction; and (d) prepare faculty and K-12 teachers to effectively teach these technologies and how to use the appropriately and ethically. Additionally, in this effort we will be leveraging neurosymbolic and generative AI-enhanced curriculum creation, personalized adaptive instructional delivery, and tutoring technologies under development at these institutions to strengthen and deliver much of the developed curriculum.
9. **Anticipated Results:** A robust catalog of AI, DS, and CS learning activities ready for AI-enhanced delivery; a modular and stackable course framework emphasizing student and teacher choice; tools for AI-accelerated course development;tools for neurosymbolic-enhanced AI tutoring systems; and overall comprehensively strengthening the American workforce beyond AI literacy to AI fluency