MISSISSIPPI GULF COAST COMMUNITY COLLEGE
Mississippi Artificial Intelligence Network (MAIN)

"The Future of College: Harnessing Innovation to Improve Outcomes and Lower Costs"
Full Committee Hearing
Tuesday, November 18, 2025 - 10:15 AM

Testimony for the Committee on Education and the Workforce
United States House of Representatives

Dr. Kollin R. Napier
Director, Mississippi Artificial Intelligence Network (MAIN)
Mississippi Gulf Coast Community College

Chairman Walberg, Ranking Member Scott, and distinguished Members of the Committee: thank you for the opportunity to testify at today's hearing, "The Future of College: Harnessing Innovation to Improve Outcomes and Lower Costs." Across the country, innovation is reshaping how colleges deliver education, connect with learners, and ensure value for students and taxpayers. In Mississippi, innovation is not an abstract goal; it is a coordinated, statewide effort to make higher education more affordable, accessible, and aligned with workforce needs. I appear on behalf of the Mississippi Artificial Intelligence Network (MAIN), the nation's first statewide artificial intelligence initiative, based at Mississippi Gulf Coast Community College (MGCCC). MAIN unites every public community college and university across Mississippi's higher education system in a single, coordinated approach to innovation, using artificial intelligence (AI) to modernize programs, reduce duplication, and expand opportunity for students and workers alike. It is not offered as a cure for every challenge in higher education; it represents what is possible when targeted innovation is organized with purpose: improving outcomes, lowering costs, and preparing Americans for the economy that is already here.

This Committee has asked how innovation can improve outcomes and lower costs in higher education. That question defines Mississippi's approach. The central challenge is clear: higher education costs too much, moves too slowly, and often fails to connect learning to work. Rising student debt and uneven returns on some degree programs make affordability and value an urgent national concern. Mississippi's model addresses each of these issues directly by reducing cost through shared resources, shortening time through modular design, and improving outcomes by aligning programs to workforce demand. In short, innovation is our tool to do what higher education was built for: helping more Americans learn, earn, and contribute.

Demographic and economic realities make this work more urgent. Mississippi, like the nation, faces an enrollment cliff and a shifting student population. The fastest-growing segment of learners includes working adults, parents, and veterans seeking flexible, affordable pathways to

new careers. Our innovation strategy meets them where they are: online, on demand, and at low or no cost. This ensures that opportunity extends beyond high school graduation throughout a lifetime of work and learning.

Innovation should lower costs, raise quality, and respect institutional and student choice. In Mississippi, this begins with practical steps we have already taken, such as shared AI curriculum delivered statewide at no cost, self-paced courses that accommodate working adults, and professional development that helps faculty use AI responsibly in their teaching. These are straightforward innovations that reduce duplication, broaden access, and allow institutions to focus more time and resources on instruction rather than rebuilding similar materials independently.

Beyond these immediate efforts, institutions across the country are also exploring how responsible AI tools may support tasks such as course updates, basic content drafting, academic planning, or early identification of students who need support. Mississippi is observing these developments with interest and evaluating where they may provide value while keeping educators firmly in control. Our goal is not to replace faculty or staff, but to reduce waste and support the work only people can do. That is how taxpayers see a return, how students see clearer pathways, and how employers see graduates better prepared for a changing economy.

Founded in 1911, Mississippi Gulf Coast Community College is one of the largest colleges in the state, operating across 11 locations with approximately 1,000 full and part time employees and a 23-member Board of Trustees. In FY2025, MGCCC served 25,509 students, 12,203 credit and 13,306 noncredit, and awarded 3,548 degrees and credentials, with nearly one third of students enrolled in a career and technical education program. This scale and reach make MGCCC an essential anchor for statewide innovation and workforce alignment efforts.

American higher education faces well-documented pressure points: enrollment decline in traditional pipelines, rising costs and student debt, uneven returns for some programs, and persistent friction in transfer and completion, especially for working adults and parents. Innovation, if it is to matter, should be humble in scope and precise in execution. According to the Western Interstate Commission for Higher Education's Knocking at the College Door projections, Mississippi's high school graduate population is expected to decline by approximately 10-15% between 2025 and 2037, mirroring national trends. This projected "enrollment cliff" underscores why flexible, technology-enabled pathways and adult upskilling programs are essential to sustain access and institutional viability. This challenge is not unique to Mississippi; it reflects the national reality many states now face.

Mississippi is organizing its artificial intelligence (AI) and innovation efforts around clear workforce needs through coordinated state-level governance rather than fragmented silos. Our approach relies on three interconnected pillars: (1) public higher education systems, including community colleges coordinated by the Mississippi Community College Board (MCCB) and universities under the Mississippi Board of Trustees of State Institutions of Higher Learning (IHL), along with K–12 systems; (2) a statewide workforce authority, Office of Workforce Development (AccelerateMS); and (3) a statewide innovation and technology platform, the AI Innovation Hub, led by the Mississippi Department of Information Technology Services (ITS) in

partnership with Amazon Web Services (AWS) and MAIN. This platform connects education, industry, and government by transforming training into practical AI use cases.

Building on this foundation, MAIN and MGCCC are establishing a complementary AI Innovation Hub on the Gulf Coast to serve as a regional anchor for applied research, education, and workforce development. The Gulf Coast hub will connect to additional hubs across the state, creating a distributed network that supports collaboration, drives innovation, and accelerates technology adoption in key sectors such as manufacturing, healthcare, education, and public service.

Through this model, we view AI to expand capacity rather than replace roles. Faculty can personalize instruction, advisors can serve more students, registrars can streamline inter-institutional transfers, and smaller campuses can share high-quality materials without duplicating development. The result is greater capacity, lower per-unit cost, faster deployment, and clearer value for students and taxpayers alike.

MAIN's role inside that architecture is clear and foundational: we convene and deliver AI workforce training and educator development at a statewide scale, with MGCCC serving as the operational hub. **Since 2023, MAIN has built the base for Mississippi's AI ecosystem, offering free, self-paced courses, professional development, and workshops that have reached thousands of Mississippians across education and industry**. Through a single, shareable curriculum base, self-paced delivery on Canvas at no cost to participants, centralized infrastructure guidance, and aligned industry partnerships, MAIN makes it faster and more affordable for colleges to implement credible AI literacy and skilling programs. MGCCC's public program pages reflect the breadth of no cost offerings, Introduction to AI, Generative AI, AI for Manufacturing, Applied Ethics for AI, and other workforce modules, built on Intel's AI for Workforce materials and adapted for Mississippi's learners and employers. This shared curriculum and open enrollment model lowers barriers for nontraditional students who cannot pause work or caregiving obligations to attend on campus. It is designed to reduce institutional costs by limiting redundant course development across multiple campuses and enabling shared access to standardized, high-quality materials statewide. As institutions explore shared approaches to course design and delivery through MAIN, there are emerging opportunities to streamline development and reduce duplication of effort.

At MGCCC, innovation extends beyond AI to every student's academic experience. Beginning in Fall 2025, the college launched its reimagined General Education Core, embedding AI, cloud computing, and cybersecurity concepts into required courses for all students, ensuring that every graduate develops digital literacy and workforce relevant competencies. Within the School of Engineering, Mathematics, Data Science, and IT, programs such as AI and Data Technology, Coding Technology, Computer Networking and Programming, each with cloud-based options, Cybersecurity, Simulation and Game Design, and Internet of Things expose learners to emerging technologies while connecting them to real industry use cases. Nearly 500 students are currently enrolled in IT related fields, including over 150 in Cybersecurity and 30 in AI and Data Technology, with pathways designed for both immediate employment and transfer to advanced degrees. Across these programs the through-line is the same: AI augments the job. Welders learn to read sensor data, nurses learn to use clinical decision support responsibly, and logistics

technicians learn to spot anomalies faster. **Workers advance into higher-skill, higher-wage tasks, and employers gain safer and more productive operations**.

MGCCC is also advancing innovation in manufacturing through the Advancements in Manufacturing Upskilling Program (AiM UP) launched with AccelerateMS and Mississippi State University. AiM UP delivers hands-on training in automated and advanced manufacturing using a full production line environment that includes robotic CNC machining, PLC controls, autonomous mobile robots, additive manufacturing, and industrial scanning. The program is designed to create a direct pipeline of work-ready technicians for regional employers while helping shorten time to skill and reduce training costs through shared lab infrastructure and industry-validated competencies.

This approach also addresses the enrollment cliff by designing programs around the needs of working adults. Self-paced modules, stackable micro-credentials, and shared curriculum reduce time away from work and lower out-of-pocket costs. When short forms of learning count toward degrees, adults can upskill for immediate wage gains without starting over.

Building on the foundation established by MAIN, two statewide drivers now carry that work forward into broader economic and governmental applications.

First, AccelerateMS launched the Mississippi AI Talent Accelerator Program (MAI-TAP), a $9.1 million dollar initiative with Amazon Web Services and the Mississippi Development Authority. The program is designed to expand capacity for artificial intelligence and machine learning across higher education and strengthen the state's technology workforce. These grants fund institution-level projects such as executive education pipelines at Jackson State University and sector-specific innovation labs at the University of Southern Mississippi that align directly with employer demand.

The program is guided by the newly established AI Workforce Readiness Council, created through the State Workforce Investment Board and AccelerateMS, to coordinate all MAI-TAP awardees and participating institutions. The Council aligns academic programs, workforce training, and private sector engagement with Mississippi's five AI workforce pillars: infrastructure, literacy, industry use cases, product-innovation upskilling, and research capacity. As the Council chair, I am dedicated to upholding our straightforward charge: fund what works, scale what proves value, and sunset what does not. Because MAI-TAP operates through the state's workforce authority, its design remains anchored to labor-market needs rather than abstract technology goals, allowing colleges to align academic and workforce resources around shared outcomes.

Second, the AI Innovation Hub, established by ITS in partnership with AWS and in close collaboration with MAIN, represents the next stage in Mississippi's innovation strategy, moving from education and workforce training to applied implementation. The Hub accelerates AI adoption across state government, higher education, and industry by coordinating real world use cases, proof of concept projects, and digital innovation workshops that turn training into measurable improvements in public service and efficiency. It provides a secure, responsible foundation for deployment, ensuring data privacy, ethical oversight, and effective resource

management, while giving students and faculty opportunities to collaborate with agencies on applied challenges. **By connecting education with state operations, the Hub bridges academia, government, and industry, illustrating exactly the kind of coordinated, outcome focused innovation Congress has asked states to pursue when showing how technology can improve outcomes and lower costs.**

MGCCC applies these same principles of access, affordability, and workforce relevance across all programs, especially in high-demand technical fields. Through its Defense Industry Training Accelerated Courses (DITAC) initiative, the college delivers fast-track, skills-based training in advanced manufacturing, shipbuilding, and defense technologies. Developed in collaboration with regional defense contractors and workforce partners, these programs are designed to shorten training time, reduce student costs, and connect participants to high-wage careers in fields vital to Mississippi's economy and national security. Complementing DITAC, AiM UP equips technicians for advanced manufacturing roles using the same accelerated, skills-first model aligned to employer demand.

Within higher education, Mississippi's systems have set mission-level expectations that align with this hearing's focus on affordability, access, and outcomes. The MCCB strategic plan commits the community college system to accessible, high-quality, affordable education tied to employer needs. These goals are now expressed in statewide workforce pathways and adult education on-ramps that MAIN supports through AI literacy and skilling. The IHL five-year plan presents a system-wide view of coordination and performance improvement across public universities, providing an administrative framework where shared curriculum, transfer alignment, and research collaboration can scale. Because MAIN integrates these existing strategies rather than creating a parallel structure, it strengthens what Mississippi already does well while accelerating targeted innovation that matters for learners and employers.

MGCCC's innovation ecosystem continues to expand through a $7.1 million investment approved by Governor Tate Reeves and the Governor's Office under the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies (RESTORE) Act. The funding supports the expansion of MAIN and the establishment of Mississippi's first Artificial Intelligence Hub along the Gulf Coast. **The Hub connects education, research, and industry across the maritime blue economy corridor, advancing workforce training and applied innovation in sectors such as manufacturing, cybersecurity, and logistics**. This strategic investment also strengthens MGCCC's role in developing a statewide AI and cybersecurity corridor in collaboration with the Mississippi Cyber Initiative (MCI), a statewide partnership focused on cybersecurity, artificial intelligence, and digital defense capabilities.

MGCCC's partnership with Mississippi State University and Keesler Air Force Base through the Mississippi Cyber Initiative strengthens this statewide effort. MCI, a collaboration spanning higher education, state and local government, and the private sector, established its initial capabilities at MGCCC's Harrison County Campus, where the Cyber Ecosystem, Systems Operations Lab, and Digital Forensics Lab are located. These facilities support advanced cyber training for Air Force trainees, college students, and industry professionals in real-world defense and digital security scenarios. The new Mississippi Cyber and Technology Center on the Gulf Coast, supported by Governor Tate Reeves, will serve as MCI's permanent headquarters and

expand capacity for applied research, training, and public-private collaboration. This partnership illustrates how innovation in higher education can directly support national security and expand high-demand career pathways for Mississippi residents.

At the statewide level, public investment and public private collaboration are accelerating progress. In June 2025, the Governor announced a memorandum of understanding with NVIDIA to expand AI education and research partnerships. This action reinforces the academic–industry linkages that support MAIN in maintaining current, employer-aligned curricula. Together, these actions help position Mississippi's colleges and universities in emerging technology fields and are intended to translate innovation into stronger workforce and economic outcomes over time.

MAIN's concentric circle model also extends to K-12 educator development, ensuring that AI literacy begins before college. MGCCC and MAIN have delivered foundational AI professional development at scale for Mississippi educators, with introductory modules and ethics content aligned to state standards and the Mississippi Succeeds Plan emphasis on growth, equity, and instructional quality. This early alignment does not turn K-12 into a technology program; it prepares teachers and students to engage AI tools critically and responsibly, which in turn reduces remediation and strengthens college and career readiness.

Our approach targets exactly what this Committee has identified: expanding access, improving completion, reducing cost, and strengthening return on investment. While outcomes will differ across institutions, there are consistent areas where AI and digital tools can make meaningful contributions when implemented responsibly. Because this Committee has asked for innovation that improves outcomes and lowers costs, I want to be precise about where AI can credibly help when paired with governance and measurement.

- **Access and flexibility**: self-paced, no cost workforce courses expand opportunity for working adults and caregivers who cannot attend on a semester schedule.
- **Transfer and time to credential**: adopting shared foundational outcomes across community colleges and universities can reduce credit loss; the statewide network supports common assessments and machine-readable articulation maps.
- **Retention and student support**: responsible use of AI tutors, early alert systems, and pacing plans can help faculty and advisors identify struggling learners sooner while keeping human judgment in the loop. AI analytics can also help identify "ghost enrollment" early, where students enroll, receive aid, and disengage before participation, protecting both institutional integrity and federal funds while enabling timely human outreach to reengage or intervene.
- **Materials and administrative cost**: open educational resources and AI assisted authoring, with faculty oversight and disclosure can reduce textbook costs and speed course updates; AI assisted scheduling and degree audits can return staff time to student facing work.
- **Operational efficiency and accountability**: AI-assisted analytics can consolidate financial, scheduling, and procurement data, helping institutions identify waste, target scarce resources to high-impact programs, and provide clearer cost-per-student reporting to the public.

- **Career relevance and lifelong learning**: Integrating AI and data-driven tools into every program ensures that graduates enter the workforce fluent in emerging technologies, while modular, stackable credentials allow adults to re-skill as industries evolve, helping Americans remain employed and competitive rather than displaced.

Each of these outcomes should ultimately be supported by evidence. Mississippi is continuing to build that understanding through the work of our systems and partners. Early feedback from learners and faculty suggests that flexibility, relevance, and accessibility are key strengths of these programs. Participants report that the self-paced structure helps them balance education with work and family commitments. Mississippi continues to observe and refine these approaches with its partners as part of an ongoing learning process to understand what works best for different learner populations.

Responsible use remains non-negotiable. The U.S. Department of Education's July 2025 Dear Colleague letter clarified how federal grant funds may support AI to enhance teaching and learning while preserving educator oversight and compliance with privacy law. Mississippi's ITS AI Innovation Hub operationalizes guidance through statewide data governance standards, privacy and security controls, vendor disclosure expectations, and human in the loop requirements for high stakes decisions. In MAIN's courses and educator development, we disclose AI use, teach methods for identifying bias and error, and maintain human assessment wherever grading or placement affects a student's trajectory. This is not innovation for its own sake; it is innovation accountable to learners, educators, and the public. Mississippi's view is that clear rules and transparency prevent abuse while letting institutions compete and innovate. We favor plain-language model cards for AI tools used with students, opt-in disclosures to faculty and families, routine reviews of bias and accuracy for high-stakes use, and human oversight for decisions with academic or financial impact.

Recent federal initiatives reinforce the importance of responsible, learner-centered adoption of emerging technologies. The Department of Education's Fund for the Improvement of Postsecondary Education Special Projects (FIPSE-SP) program identifies priorities related to expanding access, strengthening student support, and building institutional capacity through the thoughtful use of technology. While institutions will determine how these priorities apply within their own contexts, the program's emphasis on transparency, evidence-building, and safeguards align with the principles guiding Mississippi's AI and digital innovation work.

Mississippi's strategy also aligns with the White House America's AI Action Plan, released in July 2025, which organizes federal policy across three pillars, accelerating AI innovation, building American AI infrastructure, and leading in international AI diplomacy and security. Our statewide work operationalizes those pillars on the ground. MAIN's shared curriculum and rapid deployment align with the Plan's emphasis on enabling adoption and workforce preparation. The ITS AI Innovation Hub advances government adoption and evaluation while safeguarding privacy and security. **MAI-TAP and MGCCC's AI Hub contribute to infrastructure and talent pipelines that the Plan calls for, including secure environments, skilled technicians, and sandboxes that connect public agencies and educators with applied use cases**. Looking ahead, Mississippi intends to establish a federally recognized National AI Center of Excellence on the Gulf Coast, supported by MGCCC and the statewide MAIN initiative, that will enable

rapid AI testing, open data sharing, and trusted evaluation environments. This includes future capabilities for multi-domain autonomous vehicle training that will strengthen national readiness, expand high quality workforce pathways, and ensure that productivity gains translate into higher wages and broader opportunity rather than the displacement of work.

For national relevance, I offer Mississippi's experience as an example of how coordinated systems, shared infrastructure, and workforce alignment can support innovation. While contexts vary across the country, there is growing interest in approaches that link higher education and workforce partners, expand access to flexible learning options, and strengthen connections between curriculum and employer needs. Many regions are also exploring lightweight models for AI governance, short-form learning aligned with labor-market demand, and clearer data practices that help learners navigate transfer and career pathways. These themes reflect areas where institutions, employers, and public agencies continue to learn together. **The common thread is simple: innovation works best when it is transparent, outcomes-focused, and aligned to the needs of learners and employers.**

Mississippi is not claiming to have solved the challenges of higher education. We are demonstrating unity across institutions, foresight in workforce alignment, and discipline in responsible technology use. MAIN's mission is to prepare Mississippians for work with AI, not to remake higher education. The value of our model, anchored by IHL, MCCB, AccelerateMS, and the ITS AI Innovation Hub, is that it shows how a state can use innovation to serve people first: lower costs where duplication can be removed, widen access with flexible delivery, improve outcomes by standardizing what should be shared, and protect students and educators with clear guardrails. That is the work in front of us, and we are committed to doing it with transparency and evidence.

The lesson from Mississippi's work is simple: coordination and purpose matter more than size or funding. The Mississippi model is not unique to our geography; it is replicable anywhere states are willing to align systems, share infrastructure, and measure results. It demonstrates that responsible innovation, rather than regulation alone, can modernize higher education faster and cheaper while keeping people, not technology, at the center. Our commitment is stewardship: do more for students and employers with the dollars we already have and prove it with results.

Thank you for the opportunity to present Mississippi's experience. I welcome your questions and look forward to working with the Committee to scale responsible, outcome driven innovation that advances affordability, access, and success for learners across the nation.

Kollin Napier

Dr. Kollin R. Napier
Director, Mississippi Artificial Intelligence Network (MAIN)
Mississippi Gulf Coast Community College