

ALLEGHENY COLLEGE

Pennsylvania Majority Policy Committee Testimony from Allegheny College
Higher Education and Workforce Development
Ron Cole, Allegheny College President
September 2, 2025

INTRODUCTION – ALLEGHENY COLLEGE

Chairman Argall and honorable members of the Senate Majority Policy Committee, thank you for the opportunity to testify today. It is an honor to be with you. My name is Ron Cole, and I serve as President of Allegheny College located in Meadville, Crawford County, Pennsylvania where we are represented by Senator Michele Brooks who has been a champion and partner for advancing workforce development in our region.

Allegheny College was founded in 1815 to provide access to high-quality education in western Pennsylvania. We serve about 1,200 students, with half from Pennsylvania, and over our 210-year history we have grown to be a national leader ranked as a best value school for academics, affordability, and career preparation. For example, our most recent survey of graduates (with a response rate of over 80%) indicates 98% of the Class of 2024 are employed in quality jobs, pursuing graduate or professional degrees, or active in the military or service organizations.

We believe in education that leads to strong outcomes. In this regard, we appreciate the opportunity to contribute to the Committee's focus on workforce development.

WHAT ARE WE WORKING TO SOLVE?

I am inspired that you are bringing together higher education and our workforce needs in Pennsylvania - this helps to open opportunities for higher education to innovate on what we already do for workforce development.

Allegheny College is one of more than 80 independent colleges and universities in Pennsylvania that collectively award more than 77,000 degrees annually supplying our workforce with about 39,000 graduates each year who stay and work in Pennsylvania – this includes 69% of the nursing degrees, 45% of all teacher certification candidates, and 58% of all STEM degrees. These are data from a 2025 economic impact study of independent schools in Pennsylvania. In addition, these schools contribute over \$29 billion annually, through direct and indirect means, to the Pennsylvania economy, including supporting 1 in every 33 jobs in Pennsylvania.

These are significant contributions to our workforce, and I believe that our problem to solve is this: how can we build on this to attract and serve more students in new ways?

PURSUE UNUSUAL COMBINATIONS, CELEBRATE EXTRAORDINARY OUTCOMES.

OFFICE of the PRESIDENT

president@allegheny.edu | 814-332-5380 | allegheny.edu

520 N. Main St., Meadville, PA 16335

ALLEGHENY COLLEGE

OUR SOLUTIONS AT ALLEGHENY COLLEGE

What are solutions to serve more students in new ways? At Allegheny College, along with providing academic excellence with distinctive majors and microcredentials, one of our priorities is to be part of economic development in our region.

Our region has a rich history of manufacturing - in fact nearly every zipper in the world was produced by Talon Zipper Company in Meadville for nearly a century, leading to the growth of our tool and die industry, now high-tech advanced manufacturing that serves the aerospace and automotive industries and our military.

By asking how we can be part of economic development, we learned from industry leaders that their single greatest need is workforce development. Workforce development boils down to education which we know how to do. This leads to one of our solutions.

With support from the National Tooling and Machining Association in our region and the Economic Progress Alliance of Crawford County, and in partnership with The Hill Group, we conducted a needs assessment with industry partners and last year launched our new branch campus, the Allegheny Lab for Innovation and Creativity on Bessemer Street in Meadville (so, ALIC @ Bessemer) with a full curriculum to advance workforce development in advanced manufacturing along with research and venture studio incubator opportunities.

We are offering affordable courses that are stackable into microcredentials for entry-point training and upskilling incumbent workers - these are for non-traditional students. Investment in equipment includes high-end computing lab/IT infrastructure, milling equipment including 5-axis CNC, multi-material 3-D printing for additive manufacturing, automation and robotic cells, and quality assurance and tolerancing equipment. Courses and equipment are based on needs assessment and ongoing input from partners in the advanced manufacturing community.

ALIC @ Bessemer is designed to bridge paths of opportunity through education. It is nimble so that we can change and update the curriculum based on the evolving needs of our industry partners to serve traditional and non-traditional students. That means that we are developing programs to prepare our graduates for jobs with these companies, we are helping to reskill and upskill workers from these companies, and we are involving representatives from these companies as educators.

Employers are benefiting with a more highly skilled workforce and access to new technologies to grow their businesses. Allegheny College is benefitting by diversifying and increasing the number of students we serve.

We are serving more students in new ways. This is only the start.

continued

PURSUE UNUSUAL COMBINATIONS, CELEBRATE EXTRAORDINARY OUTCOMES.

OFFICE of the PRESIDENT

president@allegheny.edu | 814-332-5380 | allegheny.edu

520 N. Main St., Meadville, PA 16335

ALLEGHENY COLLEGE

Our traditional students and faculty are working collaboratively with industries in Meadville to help advance technology and improve operations. For example, a recent senior Physics major who came to Allegheny from Texas worked on a project with Optical Filters USA in Meadville, to design a robotic application to improve parts used for mission-critical applications such as military displays and medical equipment. The robot successfully increases productivity and quality of the final product. Before he graduated, the student was offered a position at Optical Filters and is now living in Meadville contributing to our local economy. Our goal is for more and more of our graduates to follow this path to build our local workforce and tech economy.

Contributing to this goal, our main campus for traditional, four-year degree students, is delivering professional skills that employers seek including critical thinking, communication, and teamwork. We have launched new majors in high demand areas including data science, engineering physics, and healthcare management which includes a master's degree option.

Along with our majors, Allegheny College launched nearly 30 microcredentials in our curriculum - sets of three courses that when taken together provide students with particular high-demand skills such as AI engineering; research design; finance; editing and publishing among others.

Launched with the generous support of an anonymous foundation in Pittsburgh, Allegheny's Community Impact Hub is designed to build capacity for non-profit organizations and government agencies in five areas that are important for community resilience: Community & Economic Development, Environment & Sustainability, Arts & Culture, Education & Social Development, and Health & Wellbeing. Capacity building occurs by integrating community projects into the college's curriculum and student-faculty research activities. Students are exposed to real-world complexities and challenges that communities face and receive mentoring from experienced community practitioners, leading to job opportunities.

Allegheny is proud to partner with the Meadville Medical Center, a nationally recognized independent health system. With the support of Senator Michele Brooks, the Meadville Medical Center relaunched the Sharon School of Nursing in Meadville. Allegheny College is providing the non-clinical courses as part of the RN curriculum delivered by the Meadville Medical Center Institute of Health Professions. This adds to our long-standing Health Coaching program with the Meadville Medical Center that offers hands-on experience for Allegheny students pursuing careers in health professions.

continued

PURSUE UNUSUAL COMBINATIONS, CELEBRATE EXTRAORDINARY OUTCOMES.

OFFICE of the PRESIDENT

president@allegheny.edu | 814-332-5380 | allegheny.edu

520 N. Main St., Meadville, PA 16335

ALLEGHENY COLLEGE

CONCLUSION

In higher education, can we build and innovate to attract and serve more students in new ways?

I believe the answer is yes, we can. In partnership with employers and with your support, higher education, especially our independent colleges and universities, can be nimble and innovative to contribute in new ways to serve society with workforce and economic growth. Our model at Allegheny College is transferable to other schools and their communities.

What questions do we need to answer to accelerate this work in Pennsylvania?

Can we attract more students to attend school in Pennsylvania with the promise of high quality education and well-paying jobs upon graduation? Are there policies that can incentivize more of our graduates to stay, work, and live in Pennsylvania? Could we imagine tax incentives for them and/or their employers? Incentives for them to buy homes in our towns?

The payback to Pennsylvania, reversing the trend of a shrinking workforce, could be significant. I look forward to the opportunity to discuss these and other questions you may have.

Education, at all levels, is essential for the success and pride of America. Let's focus on how we do this together to the benefit of all.

Thank you again for the opportunity to testify to the Senate Majority Policy Committee.

About Allegheny College

Allegheny College, founded in 1815, is one of the nation's most historic and innovative four-year colleges. With the distinct requirement of completing a major and a minor in different academic areas, students receive multidisciplinary learning that celebrates their unusual combinations of interests. This develops creative, independent thinkers with a path for educational depth and intellectual growth, preparing students for a successful launch after graduation and for future careers that may not yet exist. Located in northwestern Pennsylvania, 1.5 hours equidistant from Pittsburgh, Cleveland, and Buffalo, Allegheny College is one of 40 colleges featured in Loren Pope's "Colleges That Change Lives" and recently ranked #5 by The Princeton Review in its Top 20 Best Private Schools for Making an Impact. In its 2025 rankings, U.S. News & World Report recognized Allegheny College as one of the country's top 100 national liberal arts colleges, with special distinctions including one of the top 10 best for senior capstone experience and one of the top 25 best for undergraduate teaching, and research and creative activities.

PURSUE UNUSUAL COMBINATIONS, CELEBRATE EXTRAORDINARY OUTCOMES.

OFFICE of the PRESIDENT

president@allegheny.edu | 814-332-5380 | allegheny.edu

520 N. Main St., Meadville, PA 16335

Current Issue

July 2025

Curriculum Planning and Development

The Importance of 360-Degree Partnerships with Industry

July 21, 2025 | By Ron Cole

The Importance of 360-Degree Partnerships with Industry

By Ron Cole | July 21, 2025



At one time virtually every zipper in the world was manufactured by the Talon zipper company in Meadville, Pennsylvania. This handy replacement for the button closure originally was invented and patented in 1893 as the “hookless fastener” by Whitcomb L. Judson in Chicago. Although its early value was apparent in boots and shoes, the zipper was too complicated and difficult to mass produce—until Colonel Lewis Walker, an attorney and graduate of Allegheny College, saw its vast potential in apparel and military applications, not just in footwear.

Aware there were no machines to make zippers, Walker recruited Swiss-born engineer Gideon Sundback to create them. Walker also knew that Meadville had a skilled labor force, where he ultimately headquartered Talon which established an apprentice tool and die program to train toolmakers to build and run their precision machines.

Why tell this story? Because although the zipper industry has moved offshore, the Meadville area remains a global leader in tooling, machining, and advanced manufacturing launched by a graduate of a liberal arts college, and there are 21st-century lessons in that for higher education.

Moving beyond transactional relationships

Colleges and universities have historically developed transactional relationships with local companies to fill an immediate need, such as placing students into internships or jobs or acquiring equipment to improve facilities. For example, early on, Col. Walker's success in the development and commercialization of the zipper helped fund the construction of Walker Hall and Walker Annex at Allegheny College. While this type of relationship can be advantageous, the benefits of a more holistic, 360-degree partnership are preferable and valuable for all parties over the long term.

A 360-degree partnership is one in which the contributions and benefits are multidirectional. Each party contributes and gains something from the partnership. In the best partnerships, the participating organizations mutually benefit from meeting each other's stated needs.

Most tool shops in our region said that turnaround time is critical for competitiveness, and they have specialized technological and production needs to meet customer demand. But by listening further to what these business leaders had to say, we at Allegheny learned that a portion of what they need in their workforce is exactly what a liberal arts education delivers: critical thinking, evidence-based and ethical decision-making, and communication skills along with the ability to work collaboratively on diverse teams—like what Col. Walker applied to advance the zipper. So, from the start, the partnerships that our college is developing with our regional advanced manufacturing and technology communities leverage the core values and skills in a liberal arts education.

Beginning in 2017, Allegheny initiated a vision for a collaborative, integrative learning space where students, faculty, and staff engage with emerging digital practices, technologies, and pedagogies. This led to the launch of the Allegheny Lab for Innovation and Creativity (ALIC) on campus in 2019, providing undergraduate students hands-on experience with fabrication and design tools. With ALIC the college expanded its commitment to applied learning by introducing cooperative learning courses taught by industry experts; these offerings sparked growing interest among employers in extending these offerings to adult learners in the broader community, particularly upskilling those in the advanced manufacturing workspace.

Launch of ALIC @ Bessemer

This spring, Pennsylvania Governor Josh Shapiro joined with Allegheny College leadership, faculty and students, along with leaders from regional manufacturing companies and government to celebrate the launch of our branch campus, [ALIC @ Bessemer](#), a transformative initiative driving workforce development and education in western Pennsylvania. Key to the Governor's vision for our state is the type of 360-degree collaboration between industry and education that fosters innovation in the businesses of today and tomorrow, building a more skilled and competitive workforce and shaping the future of manufacturing growth. In his remarks, Governor Shapiro applauded ALIC @ Bessemer for opening more doors of opportunity for Pennsylvanians in Meadville. He reminded attendees that there are many paths to success and prosperity, and we need to respect each of those paths equally—and invest in all of them.

ALIC @ Bessemer is designed to bridge paths of opportunity through education. It's nimble so that we can change and update the curriculum according to the evolving needs of our industry partners to serve traditional and nontraditional students. That means that we are developing programs to prepare our graduates for jobs with these companies, helping to reskill and upskill workers from these companies, and involving representatives from these companies as educators. In other words, we're developing 360-degree partnerships.

ALIC @ Bessemer is designed to bridge paths of opportunity through education. It's nimble so that we can change and update the curriculum according to the evolving needs of our industry partners to serve traditional and nontraditional students. That means that we are developing programs to prepare our graduates for jobs with these companies, helping to reskill and upskill workers from these companies, and involving representatives from these companies as educators. In other words, we're developing 360-degree partnerships.

Numerous companies have been involved with ALIC, from guiding us in program design to providing specialized experts as instructors to sending employees for a variety of training programs. Partners come from advanced manufacturing companies, such as Acutec Precision Aerospace, Moon Tool & Die Co., Kuhn Tool & Die Co., and Pennco Tool & Die—each with decades and generations of experience. Employers are benefiting by educating their workforce and gaining access to new employees and new technologies to grow their businesses. We are benefitting by growing the number of students we serve and diversifying research opportunities. And collectively we are supporting Crawford County's determination to serve as a consistent economic engine in our region.

Experiential learning connecting students with industry

One of the things that is exciting about our 360-degree approach is the opportunity for collaborative research for students and faculty working with industries in Meadville to help solve a current problem for a local company or organization and improve operations.

For example, a recent physics major did a pilot project in partnership with Optical Filters USA on shielding equipment from electromagnetic interference. He designed a robot to apply conductive paint to provide electrical termination around the edges of transparent filters to be used on electronic displays for mission-critical applications, such as military displays and medical equipment. The robot successfully increases productivity and quality of the final product. Before he graduated, the student was offered a position at Optical Filters; he is now employed there, following up on this project and remaining in Meadville to continue the research and development that he started while at Allegheny.

Thought-starters for academic leaders

There is nothing wrong with immediate, defined transactional partnerships; they can result in getting things done on campus. But so much more can be achieved through integrated 360-degree relationships that contribute to the mutual advancement of higher education, economic development, workforce stability, and quality of life.

From the vantage of academic leadership, foundations of 360-degree partnerships include the following:

1. Start with understanding strengths and needs. Honestly assess your institutional strengths and necessities, particularly for student success and outcomes. Learn about the strengths and requirements of local and regional businesses with an open mind about how those may align with your institution's strengths and needs. Seek common ground for mutual benefit.
2. Build relationships and communicate openly with local and regional business leaders as equals. Involve local experts as educators and together identify mutual benefits to a partnership. Keep in mind that authentic relationship-building takes time.
3. Find nimble and creative ways to develop curriculum and programs according to the evolving prerequisites of your industry partners, being cautious to uphold and leverage core strengths of your institution and region (i.e., avoid being all things for all people or overcommitting to ephemeral

needs). For example, include a solid foundation of power skills from the liberal arts—such as critical thinking, ethical decision-making, interdisciplinary knowledge, teamwork, and communications—along with business and technical skills.

4. Be open to leveraging your curriculum to advance the workforce while preparing for jobs and industries that may come in the future, including the growth of artificial intelligence. Empower faculty to innovate and involve your career and professional development team in marketing outcomes to current and potential students and their families as well as employers.
5. Consider how you might serve new types of students. For example, offer coursework to train or upskill existing employees in local industry or businesses with new skills that are essential or emerging. This point returns full circle to understanding strengths and needs.

Such partnerships can strengthen a college or university and industry partners with a pipeline of new employees and graduates who will stay in the area and contribute to your local community as civic leaders, volunteers, mentors and philanthropic supporters—resulting in mutual benefits including economic growth in your region.

Ron Cole is the 23rd president of Allegheny College. Under his leadership, the college is advancing academic excellence with strong student outcomes while achieving record-breaking fundraising and alumni engagement to ensure the place of Allegheny College as a leader in interdisciplinary 21st-century education, where students and faculty innovate as creative and independent thinkers.

Tags: alliances and partnerships, experiential learning, industry partnerships, town-gown relationships

Ron Cole: What colleges offer businesses that businesses need

RON COLE

Special to the Post-Gazette

JUN 7, 2024

5:30 AM

Employers in our region need workforce development at all levels. They are having trouble filling jobs and retaining employees. The essential skills they need aren't just technical. They include skills the liberal arts can provide.

Years ago, fresh in my role as provost at Allegheny College, I reached out to local manufacturing business leaders with the idea of developing partnerships for internships and research projects that could serve both our students and neighboring industries in Western Pennsylvania.

The wrong questions

Initially, I was rebuffed with a polite, "You're a liberal arts college. You don't have anything that we need." I realized that I was asking the wrong questions. So, instead of trying to explain what the college has, I started to ask "What do you need?"

It turned out that they needed many things we could help supply. How can higher education, particularly liberal arts, meet employer needs?

A 2021 report from the American Association of Colleges & Universities, "How College Contributes to Workforce Success," reveals that more than half of employers view teamwork, critical thinking, analyzing and interpreting data, and complex problem-solving as very important skills for their workers. These are essential and transferable skills that are squarely in the wheelhouse of liberal arts education.

Some people see liberal arts education as useless in the work world. But these skills are part of making well-rounded workers. At their best, they integrate a

depth and breadth of knowledge from different fields, including STEM, social sciences (including business and economics) and humanities.

Western Pa. examples

For example, my college has the Allegheny Lab for Innovation and Creativity (ALIC), developed in partnership with local manufacturers and the Economic Progress Alliance of Crawford County. ALIC provides workshops and microcredentials as in-demand curriculum for traditional undergraduate students and for upskilling those already in the workforce.

It offers training in business leadership, 3-D modeling, editing and publishing, health anatomy and a range of other topics identified as real workplace needs, as a result of building relationships and asking employers what they need.

Western Pennsylvania boasts other examples of this approach: I-HACK at Gannon University; the Center for Intelligence, Research, Analysis, and Training at Mercyhurst University; Future Works at Pitt-Johnstown; the Education and Training Center at Pitt-Titusville; the Pioneer Accelerator at Point Park University; and the Future of Work Initiative at Carnegie Mellon University.

Having spoken with the presidents at each of these institutions, I know that each started by building relationships and asking employers and communities what they need. What do these have in common? Economic development for Pennsylvania.

Closing the disconnect

Colleges and universities and their communities around the country can adopt this approach. There are a few simple steps to close the disconnect between industry and higher education, particularly for liberal arts institutions. Ask each other what you need and be open to collaboration and innovation. Challenge assumptions. Build relationships.

Regional businesses can look internally to assess problems and opportunities that they are not currently outfitted to address and identify higher education institutions for partnership. At the same time, liberal arts institutions can think differently about who we're serving to determine which areas of expertise we can offer to our region and new ways to deliver it.

Pittsburgh Post-Gazette®

It's building relationships between unlikely partners that will be the ideal way to close the disconnect between higher education and economic development in our Commonwealth.

Ron Cole is president of Allegheny College.

First Published: June 7, 2024, 5:30 a.m.