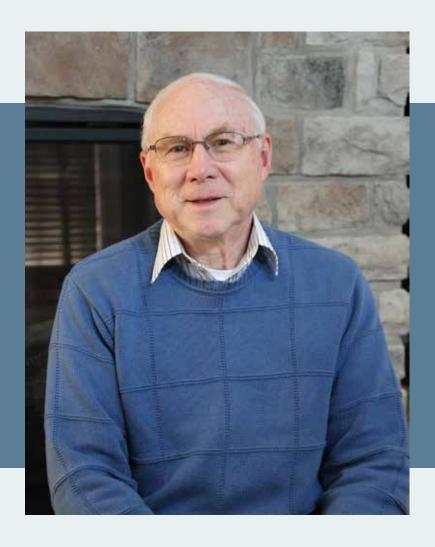
the legacy project:

Perry R. Gemmill

by Perry R. Gemmill and Johnny J Moye, DTE Many industrial arts, technology education, and now technology and engineering education leaders have made their mark on our profession. Their legacy is something that members of the profession enjoy and have the responsibility to continue to build upon.

The Legacy Project focuses on the lives and actions of leaders who have forged our profession into what it is today. Members of the profession owe a debt of gratitude to these leaders. One simple way to demonstrate that gratitude is to recognize these leaders and some of their accomplishments. The focus in this issue will be on Dr. Perry Gemmill.



Perry R. Gemmill

Professor Emeritus of Applied Engineering, Safety & Technology Millersville University

Place of Birth: York, Pennsylvania

Degrees:

Ph.D., University of Maryland, Industrial Education, 1976 M.A.E., Ball State University, Industrial Education, 1970 B.S., Millersville State College, Industrial Arts Education (Specialization in Graphic Arts, Drafting/Design and Electricity/ Electronics), 1968

Married to: Kay F. Gemmill (56 years in 2024) They have two children and eight grandchildren.

Occupational History:

Millersville University, Department of Applied Engineering, Safety & Technology (formerly Department of Industry & Technology and Department of Industrial Arts Education): Professor, 1989-2012; Chair, 1990-2008; Associate Professor, 1984-1989; Graduate Program Coordinator, 1984-1990; Assistant Professor, 1981-1984

University of Maryland, Department of Industrial, Occupational and Vocational Education: Assistant Professor, 1977-1981; Instructor, 1972-1976

Taylor Junior-Senior High School, Center, Indiana: Industrial Arts Teacher, 1968-1972; Department Chair, 1969-1972 Ball State University, Department of Industrial Education: Graduate Assistant, Summer of 1968

What individuals most had an effect on your career and why were they important influencers to your ideas and work?

My parents, who were raised on neighboring farms, completed their formal education in the same one-room schoolhouse. Early in their marriage they purchased the farm that my three siblings and I grew up on. My father was a self-employed plastering contractor, and my mother was a housewife. Farming and construction provided the environment for developing a strong work ethic with supportive family values.

I enjoyed being successful in school, and my parents encouraged my pursuit of higher education. During high school, I pursued the industrial arts track, which could have led to high school graduation without appropriate preparation for college. Fortunately, my mother and a school counselor collaborated on individualizing my track to include college prep courses in math and English. This arrangement was an appropriate precursor to the recent tech prep career pathway in high schools.

Joseph M. Devilbiss, my high school woodworking teacher, was instrumental in my pursuit of my bachelor's degree and K-12 teacher certification in industrial arts education. He developed my interest in industrial arts, set an example that I wished to emulate, and recognized my abilities with a senior high school award. More importantly perhaps, he drove me to Millersville State College on a Saturday morning, gave me a tour of the industrial arts department, and introduced me to one of the professors. This experience raised my comfort level and determination for becoming a first-generation college graduate. The person whom I met during my high school visit to Mill-

ersville was Philip D. Wynn. Interestingly, he was the professor who influenced my desire to specialize in graphic arts when I was an undergraduate and to apply for admission to master's degree programs and graduate assistantships. Dr. Wynn was the department chairman 12 1/2 years later when I was hired to teach graphic communications. Our professional relationship extended beyond the university with active participation in our state and national organizations and conferences. I was the graduate program coordinator for six years during his tenure and then his successor as department chair.

While taking an industrial arts capstone course entitled Unit Studies at Millersville and later in an innovative program course at Ball State, I was intrigued by the research and experimentation methodology promoted by Donald Maley. It was so different from the project approach that was prominent in my high school and college courses. After teaching in a junior/senior high school for four years, I decided to pursue doctoral studies and a graduate assistantship at the University of Maryland where Dr. Maley was the department chair. Fortunately, both applications were approved; however, the department needed a full-time graphic arts instructor and I accepted the offer. Thus, Dr. Maley became my mentor and my boss. His focus on his students and industrial arts pedagogy was impressive. My being in the department full time enabled me to observe this leader in action and to admire his unique educational contributions. As one of his students, I experienced research and experimentation, his philosophy for industrial arts content and methodology, and the value of industrial arts in human growth and development. As an employee, I respected his professional integrity, work ethic, and administrative proficiency.

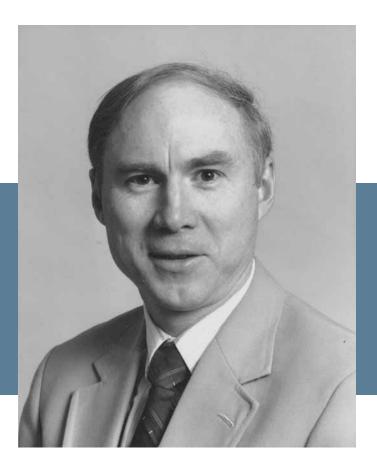
During my initial year at the University of Maryland, I met Kendall N. Starkweather who was a second-year doctoral student. We were both employed in the industrial education department and collaborated on several consultations, projects, and special events. Kendall went on to become executive director of the American Industrial Arts Association (AIAA – now ITEEA), a position in which he continually inspired and engaged me for over 30 years in numerous professional growth and service opportunities within technology

education. His leadership regarding standards-based technology education, relationships with other professional organizations, and the development of a global network for technology and engineering education are noteworthy. Today, I continue to be grateful for our ongoing friendship.

As faculty colleagues at Millersville University, I developed a collaborative partnership with Dr. William H. Skelly. I admired his advocacy for students and faculty. Bill was instrumental in the implementation and accreditation of our newly developed Industrial Technology program. We actively promoted the legislative refinement of curriculum regulations for K-12 technology education in Pennsylvania. We also developed a Technology Education Association of Pennsylvania (TEAP) scholarship program for undergraduate technology education teacher preparation students.

The department at Millersville University has had a number of national leaders who made a difference in Pennsylvania and across the nation. Who were they and what were they known for?

Department directors and chairs who were national leaders have spanned from the 1930s through today, with much promise for the future. Burl N. Osburn was the department's director of industrial arts from 1941-62. He was the 1955-56 president of AIAA. He also was the first living person to be the namesake for one of our university buildings, Osburn Hall. Earl M. Weber followed as department chair in 1962-69 and 1976-78. He was the AIAA president in 1965-66. George H. Ditlow was the industrial arts department chair in 1969-78 and AIAA president from 1969-70. Philip D. Wynn was the department chair from 1978-90 and president of TEAP for 1987. Yours



truly was chair of the Department of Industry & Technology from 1990-2008 and president of TEAP in 1990. I also served as coordinator of the 1995-2000 International Technology Education Association (ITEA) Teacher Excellence Awards and an ITEA representative with the National Council for the Accreditation of Teacher Education (NCATE). Barry G. David was chair of the Department of Applied Engineering, Safety & Technology (AEST) from 2008-14. Len S. Litowitz served as the department's chair from 2014 to 2023, was TEAP president for 2002, and the International Technology and Engineering Educators Association (ITEEA) president during 2007-09.

Numerous other department technology teacher educators also have been national leaders. Thomas P. Bell was the ITEEA President for 2010-12 and Epsilon Pi Tau (EPT) Beta Phi Chapter Trustee and Region I Director for several years. Sharon A. Brusic served as the department's coordinator of the technology and engineering education program, the co-developer of the university's integrative STEM education minor, and a leader within ITEEA's Technology Education for Children Council. Kenneth P. DeLucca served as AIAA conference registrar, TEAP president for 1993, and a voluntary technology educator in Africa. James E. LaPorte was editor of the Journal of Technology Education from 1997-2010. Joseph M. McCade was the TEAP president for 1999 and chair of The Technology Teacher Review Board for a few years. Scott A. Warner led the development of the department's technology and innovation graduate program and has been a prolific contributor to the study of creativity and design within technology and engineering teacher education.

The department also has numerous distinguished alumni who have served as national leaders within the technology and engineering education profession. William J. Wilkinson, who was among the Millersville charter industrial arts teacher class of 1934, was co-founder in 1953 and president in 1955 of the Industrial Arts Association of Pennsylvania. Mr. Wilkinson also was AIAA president for 1962-63. More recently, Jared P. Bitting was the 2008 TEAP president and the 2016-17 ITEEA president. Steven A. Barbato served admirably as the 2007 TEAP president and 2012-21 Executive Director of ITEEA. Molly Miller will serve as ITEEA President for 2025-26.

You were department chair at a time when there was a major reconstruction of your facility and laboratories. In what philosophy or strategic direction were you attempting to take the department? How would this change the type of graduate that Millersville produced from that point forward?

In general, the mission of the department was to prepare broadly educated technical personnel and technology professionals, develop a general education perspective of technology within the university, and provide relevant services to the educational and private communities. The primary purpose of the renovation and expansion of Osburn Hall was to deliver our multiprogram curricula using modern technology within transformable instructional environments that emphasize experiential learning.

Our reconstruction goals were to create a comprehensive facility with state-of-the-art equipment for teaching contemporary technologies, provide a flexible facility to accommodate future technological and pedagogical change, and enable the integration of

emerging information technologies among our multiple curricular programs. We focused on designing a facility for people, especially our students and faculty. This facility was to function as a high performance educational organization that exemplified teaching and learning effectiveness. We needed to have related technologies and educational spaces in close proximity of each other for their efficient integration. We needed facilities that were transformable to meet changing educational and research needs. We also needed facilities that promoted technological literacy, including design, and the development of technical skills within a safe and healthy environment. We wanted to transform the 1950's shoebox design of the original Osburn Hall into a modern aesthetically pleasing facility. The facility should be visually contemporary and reflective of the industrial nature of the curriculum. We also wanted the building to be inviting, visibly open, and accessible, but yet secure.

Expansion ideas focused on having current, flexible, and integrated learning environments. The dream list included adding an automation and control lab, research and development areas, multipurpose assembly areas, interactive distance learning capability, centrally located administrative office space, a technology education pedagogy lab, a prototyping/modeling lab, an advanced computer-aided drafting/design and rapid prototyping lab, and an ergonomics and acoustics lab.

During 2003, Osburn Hall underwent a total life-cycle renovation and a 19,000 square foot, two-wing expansion. Instructional and research communities were created around the educational program clusters of communication, energy/power/transportation, occupational safety and environmental health, and production (manufac-

As Chairperson of the Department of Industry & Technology, Perry Gemmill provided leadership in the expansion and complete renovation of Osburn Hall at Millersville University in 2004. This photo was taken on April 24, 2024.



turing and construction). Each community included classrooms, laboratories, faculty offices, and ancillary areas with the latest multimedia capabilities. Contemporary equipment and furnishings were provided throughout the facility. There were multiple computer labs and research and development areas. Designated facilities were available for preservice technology education teachers to learn about and experience pedagogies involving bio-related technologies and technological innovation and design. A student lounge, accommodations for student organizations, and an awards and exhibit space were provided. Restrooms for both men and women were located on each level. Facilities also were dedicated to shipping, receiving, maintenance, and repair.

Following reconstruction, this renovated, expanded facility provided numerous dividends. The organization of the facility for each instructional and research community enhanced the understanding and delivery of each designated program cluster. Students were better prepared with the knowledge, skills, and dispositions needed for their respective careers and professions in education, business, and industry. Faculty were able to fulfill their instruction, service, and research responsibilities with abundant resources. The department chair, program coordinators, and secretarial staff were able to perform their administrative responsibilities within a centrally located office complex.

Our renovated and expanded facilities enabled us to be in full compliance with the national accreditation standards for each of our three baccalaureate programs at the time of reconstruction. We attracted more well-qualified faculty, staff, and students to the department. It enabled us to be more competitive in our applications for training and research grants. It also empowered us to receive national recognition for quality education in industrial technology, occupational safety and environmental health, and technology education. In conclusion, it enabled us to continue Millersville's tradition of excellence and innovation.

Being a department chair for 18 years is a big accomplishment in itself. What major accomplishments were you most proud of during your years as department chair at Millersville University?

When I began employment in 1981, the department of Industrial Arts offered a bachelor of science and a master of education degree along with teacher certification and post-master's supervisory certification in industrial arts education. Prior to my election as chair in 1990, the industrial arts undergraduate and graduate programs were revitalized as technology education programs. The Occupational Safety and Hygiene Management (OSHM) plus the Industrial Technology (ITEC) programs were both added as department baccalaureate offerings. Educational workshops also were developed and offered during summers for the renewal and continued certification of K-12 in-service teachers in Pennsylvania. The name of the department was changed to Industry and Technology to represent its multiprogram mission.

All of these programs adapted to curricular changes and matured during my years as department chair. Each of the three baccalaureate programs was nationally accredited and recognized. Technology Education was one of Millersville's teacher education programs accredited by ITEA/CTTE/NCATE and recognized frequently as an outstanding teacher education program by ITEA and the Council on Technology Teacher Education (CTTE). Occupational Safety and Environmental Health (OSEH, formerly OSHM) was accredited by The Accreditation Board for Engineering and Technology. Additionally, ITEC was accredited by the National Association of Industrial Technology to prepare technically oriented managers in computer-aided drafting and design, construction, electronics/control systems, graphic communications, manufacturing, mechanical, nanofabrication and general industrial technology. Each program benefited from an advisory committee comprised of practicing professionals, alumni, and current students. Field experiences, including internships and cooperative education, were either required or strongly encouraged for each of the baccalaureate programs.

Non-baccalaureate education and professional development programs also were developed as department offerings. Our Associate of Technology degree program in ITEC was approved to prepare technicians for direct employment or seamless continuation in a bachelor's-degree program in ITEC or OSHM. Minors were developed for these baccalaureate programs to benefit related majors. Additionally, numerous new contemporary educational workshops were offered for inservice teachers of many subject areas. During several summers, the department employed 45 educators to deliver nearly half of the university's workshop offerings.

Department faculty were continually engaged in advancing their curricular fields through their teaching, scholarly growth, and service contributions. They sought and provided professional development to stay abreast of ongoing changes. They were leaders and collaborators in their respective professional and technical organizations at the local, state, regional, national, and international levels. Nationally, these organizations have included ITEEA, The Association of Technology, Management, and Applied Engineering (formerly National Association of Industrial Technology), and the American Society of Safety Engineers.

Another rewarding accomplishment was the department's contribution to the university's general education requirements. Department faculty engaged actively in proposing and gaining university curricular approval for a new Perspectives component for baccalaureate programs. These junior and senior level courses enable students to think analytically and critically in understanding and responding to global issues and problems. Two popular perspectives courses offered within the department were Technology and Its Impact on Humans, and Futurology: Technology, Society and Change. Additionally, other contributions that the department made to general education included the Fundamentals of Safety, Health and Environmental Issues course credited in the Social Science liberal arts block and several department courses satisfying writing across the curriculum requirements.



Perry Gemmill was awarded the Silver Service Award by the Technology Education Association of Pennsylvania during its annual conference in November 2007. Supporting this recognition are Kay, his spouse, and Kendall Starkweather, ITEA Executive Director.

The previously described renovation and expansion of Osburn Hall was another significant accomplishment for the department. It was truly a team effort that engaged numerous contributors, including faculty, staff, architects, administrators, contractors, alumni, and others. This facility provided the classrooms, laboratories, offices, ancillary spaces, and a multipurpose assembly area that supported our ongoing curricular, instructional, and administrative needs. Contemporary and emerging technologies were represented. Visuals and displays throughout the atrium and halls of the building recognized the department's mission and goals, a prestigious architectural design award, extracurricular activities, student awards, and employed graduates. A 60-seat multipurpose assembly area accommodated larger audiences in lecture courses, department open houses, and the university faculty senate as well as smaller classes and meetings when the movable walls were used to reduce the room size.

Your first year at Millersville University was as an undergraduate student in 1965, and your career as a professor in the same department ended in 2012. How was the department different at the end of your career than it was when you first started as a student?

In 1965, the department focused on the development of industrial arts teachers with approximately 250 full-time undergraduate and 60 graduate students facilitated by 10 full-time and three part-time faculty. All of the faculty were men, and almost all of the students were men. Osburn Hall housed the department with unit laboratories in drawing and design, wood, metal, graphic arts, electricity/ electronics, and ceramics. A general laboratory enabled research and development or experimentation of the unit areas plus elective

study of plastics, textiles, leather, and photography. Another general laboratory enabled elementary and special education teachers to incorporate industrial arts activities in their curricula. All classrooms were integrated into the labs except one that served as a multipurpose room. The primary pedagogies were lecture, demonstration, individual project, and problem solving. An emphasis was on holistic learning with attention to design and craftsmanship. Department student organizations consisted of the Industrial Arts Society, Industrial Arts Honor Society, and Technical Arts Club.

In the 1970s, the industrial arts program was expanded, a national honorary was implemented, and national archives were established at Millersville State College. The art department, which shared Osburn Hall, moved into its newly constructed building, enabling electronics to occupy its former space. Subsequently, the newly developed power technology component of industrial arts established its facilities in the prior electronics area. A laboratory technician was added to support facility maintenance in both the industrial arts and art buildings. The Beta Phi Chapter of Epsilon Pi Tau was installed in the department to honor outstanding students and alumni. Department leaders initiated a formal agreement to house the AIAA archives at Millersville in Ganser Library. Robert Coley served as the archivist for this collection from 1973 until his retirement in 1999. Then Marilyn Parrish picked up the archivist reins until her retirement in 2021. Currently, Frank Vitale is the archivist who continues to organize, catalog, and preserve these important historical documents. Interested visitors and researchers have continually been given guided tours and assisted in searching this invaluable AIAA/ ITEA/ITEEA collection on the upper level of the McNairy Library & Learning Forum at Millersville University.

During the 1980s, the industrial arts teacher preparation program transitioned into technology education, with a focus on technology systems and student-centered enterprise. Technological literacy provided the foundation for the technology programs, followed by technical development in communications, materials and processes, manufacturing, construction, and energy/power/transportation. Faculty were required to possess earned doctorates in their fields of expertise to earn tenure. Computer-aided technology influenced the curricular content and instructional delivery. Research and development was incorporated into technical courses. Department courses for elementary and special education prospective teachers were no longer offered. The OSHM program was relocated to the department to prepare safety and hygiene professionals, and the new ITEC program was approved to prepare technical and managerial graduates for business and industry. Existing facilities, especially the two general laboratories, were reconstructed to accommodate these curricular changes. Consequently, the department name was changed to Industry & Technology to reflect the increasing diversity of goals and programs.

In the 1990s, department leaders focused on the national accreditation of the three baccalaureate programs. Accreditation standards were met by technology education for ITEA/CTTE as approved by NCATE, ITEC for the National Association for Industrial Technology (NAIT), and OSHM for the Accreditation Board for Engineering and Technology (ABET). Major efforts also were given to establishing technology as a contributor to the general education of university students through perspectives courses. The TEAP archives were moved to Millersville University to complement the ITEA archives in Ganser Library. Additionally, Millersville technology education faculty and prospective teachers coordinated and judged Technology Student Association regional competitions for secondary school students on campus.

During the 2000s, an associate's degree in industrial technology became an approved program for the department. Major focus soon followed with the renovation and expansion of Osburn Hall as described previously. Articulation programs were established with technical and career centers plus community and technical colleges within the university service area. The student and faculty populations became more diversified. The department extracurricular organizations were broadened to include the Technology and Engineering Education Collegiate Association, Association of Technology, Management and Applied Engineering, Society of Manufacturing Engineers, American Society of Safety Engineers, Robotics Team, Human Powered Submarine Research Team, and Marauder Graphics Club.

When I retired in January of 2012, all of the department's programs continued to be governed within the School of Education; however, the majority of the department's students were not teacher education majors. Plans were underway to repurpose the master's degree program in technology education that would accommodate teachers and other professionals having a variety of undergraduate preparations. The department had in excess of 500 undergraduates and approximately 30 graduate students with 19 full-time equivalent faculty, two laboratory technicians, and 1.5 secretaries.

By 2022, the Department of Applied Engineering, Safety & Technology had been moved into the College of Science and Technology. Department curricula has expanded to include baccalaureate degree programs in automation and intelligent robotics engineering technology, manufacturing engineering technology, and packaging engineering technology plus a minor in integrative STEM education for early childhood and special education, and a master's degree in technology and innovation, having concentrations in education and enterprise.

Thank you Dr. Gemmill for your service to the profession and for sharing some of the highlights of your career. The Legacy Project continues to interview very influential leaders. It is beneficial for current (and future) leaders to read about issues that existed and how they were addressed "back in the day." In a few months the next interview in this series will appear. If you have a suggestion of a leader to recognize, contact coauthor Johnny Moye with that person's name and contact information.



Perry R. Gemmill, Ph.D. is a former high school industrial arts teacher/department chair, industrial education assistant professor at the University of Maryland, and industry & technology professor/department chair at Millersville University. He was professionally employed for 43 ½ years and

has been retired since 2012.



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