Glenn E. (Gus) Baker



any 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 a responsibility to continue and build upon.

This is the fifteenth in a series of articles entitled "The Legacy Project." 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. Glenn Baker.

Dr. Glenn E. "Gus" Baker

Professor Emeritus, Educational Human Resource Development Texas A&M University

Place of Birth: Goosecreek, Texas Married to: Judy K. Hunzeker, Humboldt, NE, 1967

Degrees:

B.S. Industrial Education (double major – Industrial Technology, 1955, and Industrial Arts Teaching, 1956)M.Ed. Industrial Education (1961)

Ed.D. Industrial Education (1966)

All from Texas A&M with post-graduate work at Northern Colorado and the University of Maryland.

Occupational History:

Various full- and part-time jobs in carpentry; electric power; an oil field; law enforcement; U.S. Army and Army Reserves; junior and senior high school industrial arts and math teacher; collegiate teaching at Wayne, NE, University of Missouri-Columbia, North Carolina State, and Texas A&M.

> by Glenn E. Baker and Johnny J Moye, DTE

Texas A&M once had a tremendous industrial arts program and was considered one of the top universities to attend for a graduate degree. Please describe the philosophical direction of the program, the successes in terms of what the graduates were prepared to do for the profession, and its effect on Texas industrial arts education when the department was at its peak.

A&M began a program in the early 1920s for both trade and industrial (T&I) and manual training (nonvocational) teacher preparation. It was housed in the College of Engineering and relied heavily on engineering labs, which were taught by master craftsmen. It remained a rather small department until 1951 when it added a degree program in Industrial Technology (IT), the second one in the nation. The program expanded, and the large enrollment provided funding for better curriculum and laboratories. It developed even further with the successful addition of an Industrial Distribution (ID) option. It offered Bachelor's and Master's degrees until 1961, when a doctoral program was added. At that time there were very few doctoral programs with majors in industrial fields, and a few more with majors in education chaired by a prominent figure in the field, perhaps a dozen in all.

The College of Engineering required a minimum of 144 credit hours for degree programs, including Industrial Education. Most departments also had many one- and two-hour lab courses that extended the technical depth for students. This led to an Aggie witticism that they were "cramming a five-year course into four!"

In 1956, W. A. Mayfield asked his former adviser, Chris Groneman, for help in organizing a state Industrial Arts association. Groneman volunteered his building space for exhibitors and arranged meeting and banquet space. There was some opposition from two of the largest I.A. teacher training programs in Texas that A&M was too vocationally oriented and would dominate a Texas association. Groneman invited each head to A&M to view his facilities and then stated that no A&M professor would ever hold office in the association. A&M would host the annual meeting, but would not select the speakers or programs. The Texas Industrial Arts Association (TIAA), and with Mayfield's influence, the Texas Industrial Arts Student Association (TIASA) were formed and met in May that year. For more than 40 years, TIAA and TIASA met on the A&M campus annually. Later, A&M hosted the TIASA state contest. No A&M professor ever held office in the TIAA or gave a keynote address at the banquet.

Chris Groneman joined the department at A&M in 1939, became head in 1947, and was the motivating force behind the IT, ID, and doctoral programs. He believed that industrial teachers should have great technical and organizational proficiency but did not preach any particular philosophy. He felt that his graduates should serve the institution in which they were employed and develop their own philosophy. He, along with Fred Kagy at Northern Colorado (AIAA President, 1971-72), advocated that teachers both work with their administrations and become administrators.

This open philosophical view helped draw graduate students from all over the nation with diverse backgrounds and philosophies. The large number of labs opened up Teaching Assistantship positions for numerous graduate students, and after 1964, a number of National Defense Education Act (NDEA) scholarships were added, which brought the total of full-time attending students in the graduate program to more than 30. Working together on group projects and discussions in the carrels gave those with diverse philosophies the opportunities to find common ground and to appreciate individual strengths and values. This helped develop a spirit of unity and cooperation among us that carried over into our professional life.

You had a long tenure at Texas A&M working with Dr. Chris Groneman. Please describe his leadership characteristics and how he made his impact upon the profession.

Chris Groneman was a charismatic man raised as an orphan in a Kansas Mennonite community. His early background included farming and carpentry. After working his way through college, he became a manual training teacher, a football coach, and a school principal. He later taught at East Texas State Teachers College under Dr. Grove before moving to Texas A&M. He completed his Ed.D. at Penn State under Norm Pendered about 1943.

Groneman made deals with Delta and other manufacturers to equip several shops with their equipment and place signs recognizing them as sponsors. Sometimes the equipment was donated, and sometimes just on Ioan. He did the same with Pittsburgh Paints to color code all the labs. Thus, he was able to augment the engineering lab courses with labs in woodwork, wood technology, graphic arts, electronics, manufacturing, and several courses in metal work. Each lab was brightly lit, highly organized, and kept clean and neat. He wanted each lab to be an exemplary model.

Based on his experiences with the IT program, Groneman felt that IA programs at any college should not stand alone, but should have similar technical programs that would bolster enrollment and funding. When I was at Wayne, Nebraska, I was able to develop a highly successful program in Industrial Management to prepare managers for the numerous small manufacturing businesses in eastern Nebraska. A large number of Groneman's doctoral graduates who became department heads also developed various programs in industrial or engineering technology and, in almost every case, augmented the enrollment and funding of the entire department. In some cases, in the face of diminishing industrial arts programs in the public schools, the technology programs survived when industrial arts teacher preparation programs disappeared.



Gus Baker.

Groneman was my advisor for all my degree programs. He was a role model for my career and greatly influenced me both as a person and a professor. He was very demanding, but if you did your best, he would calmly work to find how you could improve. He never faulted you for failure if you really tried. I think he viewed every student he ever had as someone who could succeed in life if given a chance.

Early in his collegiate career, Groneman joined the American Vocational Association (AVA), the only professional organization at the time for IA. Groneman was both an Industrial Arts and a vocational teacher educator and, as such, generally focused on eclectic rather than theoretical programs. In 1939, he and others formed the National Association of Industrial and Technical Teacher Educators (NAITTE) to provide the first forum for research in industrial education. NAITTE was affiliated with AVA, and Groneman served as one of its early presidents. He became a dedicated advocate for A&M teachers to belong to and participate in professional organizations, and he emphasized this in the doctoral program. One of the first questions we could expect at our qualifying exam was, "to what professional organizations do you belong?" Groneman was particularly proud of of the AVA's project, a *Guide* to *Improving Instruction in Industrial Arts*. This work, published in 1953, was both visionary and detailed. It identified student competencies, types of shops, including those in communications, power, and transportation—key elements of the curriculum advocated by W. E. Warner at Ohio State (AIAA President, 1939-40), and set up standards for programs of all types. Groneman hoped this work would both lessen the growing rift between programs viewed as "tainted" by vocational ideas and the pure general education programs as touted by W. E. Warner and others, as well as provide high standards for all industrial arts programs.

Groneman felt that students should have current information about quality schools and industries. To this end, he required all seniors to attend a one-credit-hour seminar each semester.

By 1964 there were at least a half-dozen philosophies of Industrial Arts (some dating back to the 1920s) being advocated at various universities. Some traditional shop courses were losing relevance in our emerging technological society. However, there was often no clear-cut direction, as most public schools persisted in the traditional woods, metals, and drawing, and colleges had to prepare teachers for them. Some of the theoretical programs were more like hallucination than vision, particularly when implementation with real students was considered. However, within the professional organizations, and in particular, AIAA and its teacher education council (ACIATE), advocacy and politics prevailed. Some of the tactics were divisive. A&M was identified with the AVA rather than AIAA by many, and as a result, few Aggies ever held office in either AIAA or ACIATE.

Some of us in the doctoral program had received all our previous degrees at A&M. Groneman thought we should broaden our knowledge in the field and required us to take two summers of work at other institutions with nationally recognized professors. I first chose Northern Colorado where I studied under Fred Kagy and also took an electronics course partnered with Jim Good (AIAA President 1979-80). Kagy was much like Groneman in both philosophy and humor, and Jim and Mary Good and I enjoyed numerous, lengthy discussions of content and methodology. These influenced both my dissertation and my first book, *Electricity Fundamentals*.

My second summer (1965) was spent at Maryland with Don Maley. Groneman influenced the TIAA to invite Maley to give the keynote address at its annual conference at A&M in February of that year. I was Maley's guide on campus and was intrigued by both his ideas and his use of problem-solving methods. His ideas were not tied to specific eras or industries, but were driven by student interests. I talked to him about his summer school, and he seemed enthusiastic to have me attend, regardless of what I might wind up teaching. When I got there, I was stopped by an officious registrar who wouldn't let me enroll unless I had a degree plan on file. Maley extricated me from the clutches of bureaucracy. It was an enlightening summer, enhanced by weekly trips to the Smithsonian and other landmarks. A considerable part of my dissertation (an experimental study of methods of teaching electricity) was influenced by him. I think I should also throw in one other little known fact about Don Maley. He had been a PT boat commander in the same squadron as John F. Kennedy in WWII.

Groneman was also a prolific writer. He published more than 100 magazine articles and about 20 books. Three (one in general shop with John Feirer, and two in woodworking) provided an income that far exceeded his salary. He really felt that his doctoral graduates should be active in professional organizations and should publish. Several of us had either published articles or received letters of acceptance at our final defense. At one AIAA reunion about 1972, Everett Glazener noted that A&M's graduates had published almost 200 articles, numerous books, and two of us were deans. I thought it was pretty impressive because in the first five years of the program, only 16 of us graduated.

One of Groneman's last acts as department head was to hire Donald L. Clark, a new doctorate from Ohio State and an advisee of Don Lux, to teach World of Construction and World of Manufacturing in the industrial arts teacher preparation program. Groneman and everyone at A&M were typically shunned by Ohio State as vocational education enemies to their programs. However, some Texas schools were beginning to offer these programs—funded by vocational education grants—and Groneman wanted his graduates to be able to teach them.

You were very active with industrial arts student organizations and experienced many successes. Please describe the Texas student organizations and what they did for students in your state.

Groneman was a strong supporter of student organizations, and I was a student assistant at the first TIAA/TIASA conference in May of 1956. When I returned from active duty in 1958 I considered working in industry but knew work was a four-letter word. Teachers work hard (two four-letter words) but had three months of vacation. I began teaching in Midland and found that TIAA/ TIASA had divided into regional associations for monthly meetings. Regional project contests were held, with the top three in each category (subject and course level) qualifying for the state contest. There were three of us teaching I.A. at Midland High School, and we rotated being student club advisor. I found that clubs, contests, and organizations enhanced our program and offered leadership opportunities for our students. I also observed that students who were actively involved in these activities were seldom discipline problems and generally improved their grades. Local media were also eager to mention the success of student contest winners, which helped draw favorable attention to our program.

I might also mention that while I was an undergraduate student at A&M, we had a student club open to all department majors, and an honor society (Iota Lambda Sigma). Each had one or more social events per semester, and Groneman made the student leaders do most of the arrangements as a leadership experience. I was fortunate to hold offices in both groups during my time as a student and found that the experiences were extremely valuable. I was an advocate for student clubs as a teacher at all levels. There is no other place that taught organizational leadership, event planning, or financing activities. I also found that students could be very creative in planning events, and allowing them to exercise that creativity really amplified their interest and activity levels. If a person wants to be involved in civic, social, or professional affairs after graduation, these are vital skills.

I joined Epsilon Pi Tau and later became the chapter advisor at NC State. I guided that group as they developed an impressive initiation ritual, which they performed for several other chapters, and when I returned to A&M, I was the advisor at various times for the club for all our majors, lota Lambda Sigma, and the Texas Collegiate Industrial Arts Association. Later, the American Industrial Arts Student Association (AIASA) was enhanced and enlarged, and I had the privilege of being on the national advisory board for several years. I remember that we were in a quandary about developing a system of recognition for student achievement that would not be based on grades or projects alone and would not involve a national competition.

I was outspoken and critical of teacher education programs that did not sponsor student organizations. Yes, I promoted student organizations at the public school level, but I felt that the major reason teachers there did not sponsor them was because they weren't taught to do so. I like to think that I viewed students much like my mentor, Chris Groneman. Every student was someone who could be encouraged to realize his or her own potential, and that my own beliefs or philosophy were not vital to that end —I was a teacher, not a preacher!

As your career was winding down at Texas A&M, the program was being diversified and moving toward nonexistence compared to the more successful times. What caused the demise of this once very strong program?

In 1969, a College of Education (COE) was established at A&M, and the industrial arts and graduate programs were moved to the COE, with James L. Boone as Head. The Engineering Technology programs stayed in the College of Engineering, with Everett Glazener as Head, but IA students continued to take lab courses in

the legacy project - Glenn E. Baker

ET until engineering requirements forced Boone to develop new labs for IA students. Boone's faculty consisted of himself, Les Hawkins, and Don Clark, and was the only department within the new college to have national recognition.

Boone had the support of the new college's dean, Frank Hubert, who used money from other sources to bolster the I. Ed. Graduate program with assistantships and the undergraduate labs with new equipment. Boone developed a program in Educational Technology that included audiovisual aids and computer use. Frank Clark coordinated the program and initiated the first computer classes. When Dan Householder took over as head in September 1977, Hubert continued his support. However, by the early 1980s, both graduate and undergraduate enrollment declined, and Householder had a new dean who was a classical scholar.

During the 1980s, widespread educational reforms stressed math and science and eliminated most elective courses. Industrial Arts, usually an elective, began to disappear from the public schools, and the demand for our teachers rapidly diminished. Our efforts to develop a nonteaching option were not supported. Master's level enrollment dropped drastically as Regional Service Centers offered workshops that were deemed equivalent to graduate credit for pay raises by the Texas Education Agency. Successive deans stripped the program of Educational Technology, Safety Education, and graduate assistantships, which diminished the department's ability to attract quality students.

We were given a mandate in 1986 to end all undergraduate programs by 1990. I knew most of our graduates were not teaching, but were typically working in either construction or industrial training. In 1987, I started a graduate program in industrial training that was built around weekend programs offered both on and off campus. The type of student targeted was already employed in some type of Human Resource Development (HRD) program at a substantial salary that precluded enrolling for full-time coursework. I mainly used a seminar-type format for students to share experiences; it was a cooperative effort between Adult Education and Community Education and was immediately successful. In 1991, the Industrial Education department was eliminated, and what was left of our graduate program was merged with Adult Education in a new Department of Educational Human Resource Development (EHRD). New Master's and doctoral degrees in Educational Human Resource Development were approved by the state.

I don't think the demise of our program was unique. I think teacher education was too hung up in philosophical dissension and lost touch with trends in education, school administrations, changing technology, the changes in industrial production, and the needs of students. Computer drafting and model rocketry helped some programs survive, but these efforts were not led by teacher education. To paraphrase the old comic strip, *Pogo*, "We had met the enemy and he was us!"

Thank you Dr. Baker for your service to the profession and for sharing some of the highlights of your career. The information you provided is truly a view of how our profession has changed over the past 60 years.

The Legacy Project has now interviewed 15 very influential leaders. It is beneficial for current (and future) leaders to read about the issues that existed and how they were addressed "back in the day." In a few months the next interview will appear in this journal. If you have a suggestion of a leader to recognize, contact the author with that person's name and contact information.



Glenn E. Baker, Ed.D. Starting as a carpenter, oil-field worker, and law enforcement officer, Dr. Baker then become an industrial arts teacher and later went on to be a Professor of Educational Human Resource Development at Texas A&M.



Johnny J Moye, DTE serves as ITEEA Senior Fellow. He is a retired U.S. Navy Master Chief Petty Officer, a former high school technology teacher, and a retired school division CTE Supervisor. He can be reached at johnnyjmoye@gmail.com.

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