



the legacy project

Lee H. Smalley, DTE

BY
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Many vocational education, 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 seventh in a series of articles entitled "The Legacy Project," which focus 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. Lee H. Smalley.

Dr. Lee H. Smalley, DTE

Born: Mt. Auburn, Iowa, October 8, 1926

Married: Helen, since June 1, 1952

Degrees Held:

B.S. Industrial Arts, Iowa State Teachers College
M.Ed., University of Maryland
Ed.D., Michigan State University

Children: Dennis, Laura

INTRODUCTION

Occupational History:

Iowa Department of Public Instruction; Supervisor of veterans' on-the-job training
Tama and Waukon Iowa Schools; industrial arts, driver education, coaching
Lincoln School in Ypsilanti, Michigan; industrial arts and driver education
State University of New York at Buffalo; Professor
Wheaton, Illinois Public School; Supervisor of non-academic departments
University of Wisconsin-Stout; Professor

Since the previous contributors to the Legacy Project have all been administrators, I am pleased to be selected as the first classroom teacher. Administrators are an important part of the educational experience, but they are not the "tip of the instructional spear." We leave a legacy, too. From 1950 until I retired in 1992, I spent 35 years as a teacher, three years as a graduate student, and four years as a supervisor. I turned 89 years old on October 8, 2015, so if some of my ideas are deemed to be old-fashioned—so be it!

1. What distinguished your teaching career?

I accept the assumption that every career is unique in some way. The definition of “distinguished” as it is used here refers to a recognition of the uniqueness—not a value judgment—of the experience.

• Where did you teach?

- Public Schools: Iowa, Michigan, Illinois
- Higher Education: Michigan, New York, Wisconsin
- Other Countries: Canada, Trinidad, Scotland, Saudi Arabia, Taiwan, American Samoa

• What did you teach?

- Public Schools: industrial arts, driver education, coaching
- Higher Education: curriculum development; tests and measurement; issues in vocation and technical education; future studies; future of work; future of technology; impacts of technology; history and philosophy of technical and vocational education; philosophy of modern education; woodworking; individualized instruction; training in industry; teacher certification courses in Wisconsin Technical Colleges

I only mention the names of formal courses I taught, whereas everyone knows teachers cast a wider net of influence outside the classroom and the formal list of objectives.

• How did you teach?

If you use a problem-solving model, then all solutions or answers are tentative. My job, as a teacher, was to challenge whatever the student said, to test his or her commitment or to see if an answer could be improved. The more mature students “caught on” to this technique and, in fact, enjoyed it; but others found it difficult if I did not tell them the correct answer. Alfred North Whitehead said, “Ideas, like fish, need to be caught anew each day.”

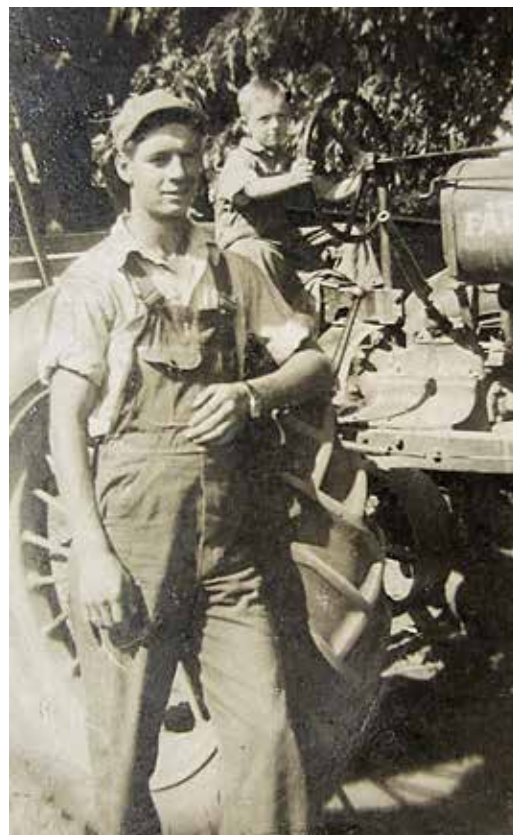
I continually challenged myself by challenging others to test ideas and opinions, to express them, to “air” them for their usefulness and their logic. I never taught a course the same way twice. I put as much time as necessary into my work and expected students to do the same.

• Why did you teach?

At first, because I thought I might be able to, but later, because I could, and finally because I had to.

• Publications and Awards

- Selected as the Technology Teacher Educator of 1986 by the Council on Technology Teacher Education.
- Named the first Hormel Professor at UW-Stout in 1987.
- Founder and co-director of the Center for Future Studies at UW-Stout.



- Book review editor, *School Shop, Industrial Arts and Vocational Education* magazines.
- Author, *The Lives and Writings of Lee Smalley*. (2015). 90 pages.
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2. What should new teachers be most concerned about as they are starting their careers that will have a long-term effect on their success? Why?

There are some standard chores in a classroom that should be routinized as soon as possible in order to get to the more difficult operations that make a teacher successful. Then will come the question of what content to select. Young teachers should remain flexible, studying the feedback so they can get their objectives and results as close together as possible. The same is true for the methods of presentation. One size does not fit all, so they will need to have a variety of methodological tools in their kit, depending on the nature of their students and other variables.

These will get them into the “good” category, but to enter into a “great” category, they will need to develop relationships with stakeholders at every level: students, staff, faculty, administration, parents, community members, industry partners, and professional colleagues. Teachers should remember not to make an enemy unless it is to their own advantage.

Visibility is necessary in each of these relationships in attendance, writing, or speaking. This takes time, since both successful and unsuccessful teachers have the same 24 hours to spend each day—the difference is how they allocate their time and effort. The motto for some administrators is to “administer by walking around.” A motto for teachers might be “success by

being around.” The give-and-take with a relationship is “ever-bearing,” but one never knows when the harvest will be, since that is part of the excitement—the journey to success.

3. You have been one of the few people in our profession with a career that included manual arts, industrial arts, and technology education. These different eras covered a lot of time and new directions for the field. What was it like to have experienced these changes as your career was progressing?

As an overall answer I would say I grew as the discipline grew. I was an “empty vessel” when I entered Iowa State Teachers College (ISTC) in the fall of 1946. I had just been discharged from the U.S. Navy with no saleable skills or preferences of a career. Since I was on the G.I. Bill, they suggested I take a series of tests for interest and aptitude. The tester said the results indicated I should select a major in industrial arts education... and so my journey began.

My first two years were rather routine and then—WOW!—a life-changing event happened. Dr. Walter Ditzler, a general shop teacher at ISTC, asked me if I would like to be his student assistant for 35 cents an hour. I accepted, and he remained a mentor to me until he died at the age of 93. He had received his Master’s Degree from The Ohio State University under the direction of Dr. William Warner, who was a graduate of Columbia University while it was still under the influence of Professor John Dewey. Ditzler had adopted Dewey’s problem-solving method to the project-planning sequence in industrial arts. That made sense to me, then and for the rest of my life, so I was solid on the method of teaching.

My next academic adventure was at the University of Maryland in 1954-55, with my advisor, Dr. R. Lee Hornbake. I learned where our content should come from—contemporary industry and technology. The Maryland Plan emphasized mass-production, experimentation, and group projects. It was so logical to me that it was easy to slough off some of my previous teaching practices and embrace these. So, now I was solid on the content we should teach.

In between degrees, I was teaching industrial arts in high schools and trying out some of the new ideas I had learned. It was now time to get that advanced graduate degree so I could enter teacher education. My choice was to study with Dr. Jack Fuzak at Michigan State University. His quiet and wise council suggested I take more courses in sociology. This proved to be the third pillar needed for a stable structure, just as Buckminster

Fuller had identified the tetrahedron as the basic building block in nature. This provided me with a better appreciation for the role education has to play in our society, translated through goals and objectives.

When the changes came to technology education, I was ready to participate, for none of the proposed programs went against the beliefs I had developed in methods, content, and objectives. As an “early adopter,” I felt I made good choices on the horses I would ride, for they proved to be durable through a changing environment.

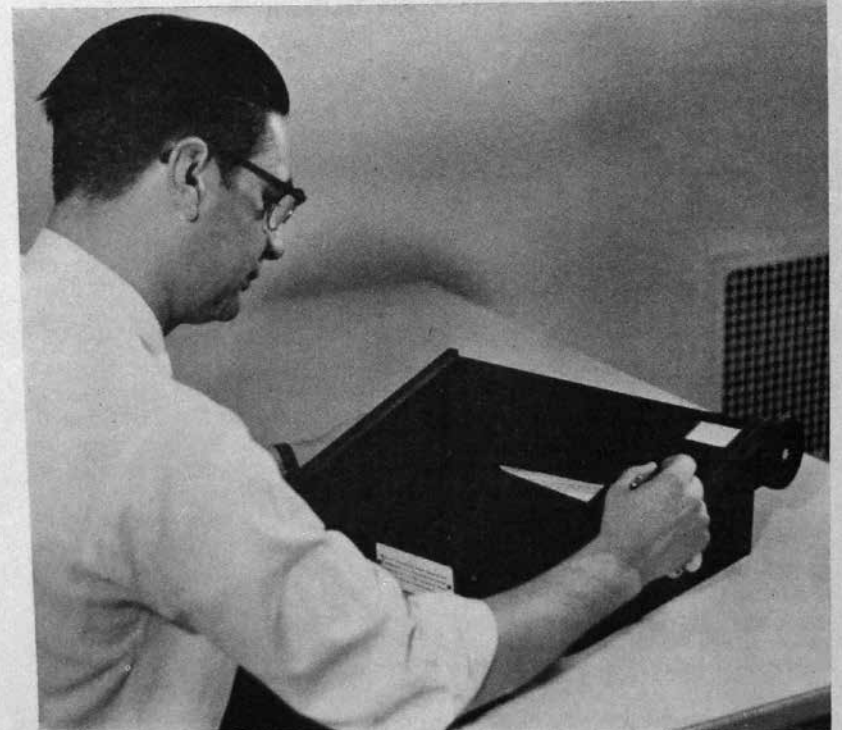
I moved easily from one era to another because I always believed every decision was tentative until proof was presented that a change was beneficial.

4. The relationship of industrial arts to general and vocational education was at one time a very political relationship, causing many big debates about the role that industrial arts should take in education. Were the debates good or bad for the field? What were some of your experiences related to these debates?

Debates are supposed to be generally good for all participants. They are to get positions out on the table so that a discussion or a decision may follow. I have not seen or heard of this procedure doing much good. In the early 1950s, the State Department of Public Instruction in Iowa organized a debate in Des Moines on the role of industrial arts and vocational education. As a young industrial arts teacher I was in the audience for some clarification and guidance. Nothing seemed to go right. The moderator was more interested in keeping to the strict Robert's Rules of Order than any resolution to the questions. There was supposed to be a followup, but I could never find any. There was never any decision made or “endgame” identified. These people could have used the concept, “not either or, but both and more” to good advantage. The present day political debates have the same outcome as the one I described.

Why are we still not discussing this relationship? First of all, the question was badly constructed. The debate merely delayed a resolution until events moved on to render it moot. The basic question still remains, “How do we deliver an educational experi-

The author, Lee Smalley, demonstrating the teaching device developed by his students. The white square at upper right is where the student writes in his answer to the question that appears in the pie-shaped slot after he turns the knob at upper right. The author suggests that devices of this sort are excellent for teaching related information in shop.



November 1960

ence that will help young people become productive members of an emerging American culture in a global context?” Now, that is worthy of some discussion, not a debate!

5. You were very active during the 1960s and 70s when many teacher education institutions stood for selected philosophical directions that defined their programs, gave them reason to be leaders, and directly influenced their students in a purposeful way. Why do you think such activities stopped at universities? Should higher education programs of today be promoting similar directions, or pursue something entirely different? What is lacking in the current higher education technology and engineering education programs?

Why did these innovative activities stop? All revolutions and forest fires have to stop when they run out of fuel. The university faculty got tired or retired, completed their part, or needed the time to consolidate and validate their program. The younger faculty members picked up what they wanted and filled in the rest from their own experiences, just as they have always done.

THE LEGACY PROJECT – LEE H. SMALLEY, DTE

We should not denigrate our revolution. What other subject areas in our schools were offered so many curricular options as we were in the 60s and 70s? We experienced a successful revolution. Since education is not science-based, we cannot respond to new ideas like doctors did to penicillin, for we do not have the data to prove effectiveness.

Why did these innovations generally stop at the universities? Very simple, that's where the money stops. If congress had included education in the Land-Grant Act in 1862 along with agriculture and the mechanical arts, we would be light years beyond where we are now. Having several extension agents in almost every county in the U.S. connecting the agricultural research from the universities to the farmers in the field has produced the most productive and efficient food and fiber supplies in the world. The universities have no clout over the public schools. Each public school industrial arts teacher was a domain unto himself, answering only to his or her local supervisors. All the university faculty could do was talk, if invited. The agricultural agent had samples, examples, publications, research, grants, a presence, etc.

We will need money, prestige, and a saleable product (students) to "become." In the poem "A Taxonomy of Time" (next page), I take us from training to teaching, and from education to becoming; always rising in complexity, acceptance, and confidence. I made sample wooden joints in high school manual training; in college I learned to teach the industrial arts; and as a college professor I was fortunate to be part of the emergence and maturity of technology education. Now, in retirement, I watch as we partner with science, math, and engineering to prepare a citizenry for participation in an extraordinary century. I cannot expect less.

What is lacking is mostly maturity. We need to grow our public relations; we need to grow our professional relations; we need to grow our research so we have confidence, not just hope, in our contributions; and we need to grow our belief that our discipline and our country are on the right track, and the coming generation will continue our quest. Then we will have "become!"

6. People like Robert Swanson, R. Lee Hornbake, and Kenneth Phillips were all active leaders in our profession at the same time as you. What qualities did they have that gave the kind of leadership needed to universities when they were active?

When my granddaughter was in the seventh grade, she called me and asked what my definition of a leader was. I replied, "A



Lee and Dennis Smalley.

leader is one who has followers." I will stick with that definition today, but the question now changes to "Why do you regard... as a leader?" Now it gets complicated, as it should, because there will be a variety of answers, based on each person's experience and need.

If we follow this definition, we will not provide a list of what every leader should have, for there does not seem to be such a magic list. Leaders can come in all sizes, shapes, and colors. And what do we do with the Buddhist saying, "When I am ready, my teacher will come"? Evidently individuals not only need different types of leaders, but also at different times in their life. So, are we to believe that all of us may be a leader to someone during his or her lifetime? What a concept!

General George Patton was one of our best leaders in WWII. He was generally acknowledged to be a military leader who had a passion for killing Germans. A friend of mine was in his Army in Europe, and he told me he never wanted to socialize with Patton, but he would follow him wherever he went in the war.

Another problem with a leadership list is that other variables intervene, like resources that may or may not be available, or constraints that operate behind the scene. We usually assign more options that are available to decision makers than they do themselves, which means the outsider just doesn't understand the complexity of a particular problem or situation. Remember, "the devil is in the details."

Hannibal is regarded as one of the best historical generals, having lived in the 2nd Century BC and fought the Romans for many years. He won every battle, except the last one. His motto was, "Never get into a fair fight." Except for his last battle, he al-

ways selected the site, and if it wasn't in his favor he moved on, to live to fight again. Will this idea work often enough to include on our magic list for people to memorize?

I don't think you should borrow another group's leader any more than you would borrow another person's wife or husband. You need to do the heavy lifting yourself, as this will make you a better follower and a better leader. Leaders are wonderful to watch, but so are magicians, as they both seem to have a common synonym—magic!

7. We know that you write poetry. Would you write a poem about technology and engineering education?

A Taxonomy of Time

While craftsmen sharpen their tools,
to join the timbers
More young children attend school,
maybe to learn a trade.
It's about time we trained
them manually.

While workers were more specialized,
having additional time and money,
Factories replaced the farms
as places to work for pay.
It's about time we taught
the industrious arts.

While both sciences and skills
were required and expanding,
The gap between was also growing,
needing rules to connect practice to theory.
It's about time we educated
about technology.

While improvements will come from
both microscope and telescope,
Our heritage of freedom and creativity has
planted a new flowering of education.
It's about time we became
the STEM!

*Lee Smalley
2015*

The Legacy Project has now interviewed seven 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.



Johnny J Moye, DTE recently retired from his position as a Supervisor of Career and Technical Education at Chesapeake Public Schools, Chesapeake, VA. He can be reached at johnnymoye@gmail.com.

Nominate an Exemplary Teacher or Program Today

Do you know a teacher or program you would like to nominate for one of ITEEA's Professional Recognition Awards?

The highest honors given to technology and engineering education teachers and programs are presented in recognition of outstanding contributions to the profession. The Program and Teacher Excellence Awards provide public recognition at the local through international levels. December 1, 2015 is the nomination deadline for ITEEA's Professional Recognition Awards.

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