

## **My Philosophical Creed on Learning, Teaching, Agricultural Education, and Leadership**

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### **Learning**

I define learning as the process by which individuals acquire and order experiences, and convert these experiences into meaning. Thinking is both the process of learning and the application of learning, and it is a multidimensional process. I believe that thinking requires one or more of the senses, the emotions, and often involves a psychomotor process occurring in tandem with the learning process.

Take for instance the sport of baseball. Attending a baseball game is more than watching a ball being tossed around by players on the field. It involves the smell of popcorn and hotdogs, the roar of the crowd, and dozens of other sensations. When the pitcher pitches the ball towards the batter, the batter has to use his or her senses and cognitive ability to determine the speed and trajectory of the ball before deciding whether or not to swing at the pitch. Once the decision is made to swing the bat, the batter must do so with sufficient force to drive the ball into the outfield. The senses, emotions, psychomotor skills, and thinking processes all merge together to form that which I call learning.

### **Teaching**

Learning is a highly individualized, yet natural process. It is not a question of whether or not individuals learn, it is more of a question of how they learn. Teachers are interested in the “how” of learning. By determining the conditions and factors that positively influence the rate and depth of learning by the individual, teachers can develop methods that encourage learning. The motivation to learn comes from within the individual, but the teacher can facilitate learning.

### **Agricultural Education**

In the early 1900s, vocational education generally meant the acquisition of skills or competencies through some type of instructional program or apprenticeship. The purpose of learning these skills was to develop a ready supply of experienced workers for farming or industry. Vocational education in that era consisted primarily of apprenticeship programs that trained young men and women on the job.

Unfortunately, this training consisted mostly of observation and imitation without any explanation of the underlying theory and practice necessary for full understanding of the work being done. Apprentices would follow their tradespersons around and help them as they completed their tasks. Often, the tradespersons would not fully explain the techniques or skills the apprentices were observing. The quality of the apprentices' work was highly related to the quality of the tradespersons' work. This left young workers with a “hit or miss” education in the industrial arts. The inappropriateness of this method of training young men and women for vocations was beginning to be felt in the economy. The advancement of technology in industry was delayed by a lack of well-trained workers prepared for emerging occupations. A new system of vocational education was needed.

The new system of vocational education for the twentieth century was infinitely better than the old apprenticeship system. Vocational education was provided in an organized and systematic method of instruction. Students were no longer limited to apprenticeship experience. In agricultural education, Rufus Stimson pioneered the development of supervised farming practice, which is the precursor to supervised experience in agriculture today. Young men developed farm projects under the supervision of an agriculture teacher, who closely monitored the students' operations.

That was then, this is now. The old industrial age is over. We are now in a new industrial age focused on intelligent machines, automation, biotechnology and globalization. In order for agricultural education to continue to exist, we must:

1. Provide authentic instruction. To be effective and useful, agricultural education must be a mirror image of the current state of technology in the agricultural industry. Students must use the same types of equipment, perform the same tasks, and be exposed to the same risks as someone who is currently employed in an agricultural profession. It is wasteful and impractical to teach students skills that are outdated or not essential to their chosen fields of endeavor. Instruction should go beyond general training in agricultural occupations and provide training specific to jobs in the local community.
2. Create a relevant curriculum. The agricultural education curriculum in a school should provide courses that capitalize on student interests and abilities. Students who are interested in the subject matter and see it as an essential tool for helping them become established in the careers of their choice will be motivated to learn. Agricultural education is not a good choice for every student, and only those students who are interested in pursuing careers in agriculture or related areas should enroll.
3. Build capacity for critical thinking. The agriculture profession requires highly skilled workers. Agricultural education should consistently provide learning experiences that encourage higher-order thinking. Teachers should prepare learning experiences that cause students to analyze and critically appraise information and to be creative. Students should be able to make connections between knowledge acquired through cognitive means and psychomotor skills related to that knowledge. For instance, a student must understand the principles of electricity before he or she can safely use a shielded metal arc welding machine.
4. Focus on preparing students for the jobs of today and tomorrow. Psychomotor skills learned in the agriculture classroom must be directly related to current occupational skills and must be authentic in nature. To engage students effectively in the process of learning, the learning experience should be exactly the same as one might expect to find in the industry. Furthermore, these psychomotor skills must be practiced to the point of mastery so that good work habits are established and skills are engrained in long-term memory. Students who are not prepared to the minimum level expected of gainful employment in the industry are not well served by the agricultural education program.
5. Continue to build on the career-based curriculum. The agricultural education curriculum should be driven by the market demand in agricultural occupations. The

instructional program should provide learning experiences that prepare students for the entry point into agricultural jobs in the community, even if the skills needed by the agricultural industry in that local economy are less efficient and less technical than in other communities. For instance, if the local economy needs workers to operate farm machinery, then instruction should prepare students for jobs of that type. If the local community requires workers highly skilled in biotechnology subjects, then the curriculum should prepare students accordingly.

6. Prepare highly effective teachers. Agricultural education in the local school community will be only as successful as the skills and abilities of the agriculture teacher will allow. The teacher is essential to the success or failure of the program and must be highly qualified, well trained, and enthusiastic about the profession of teaching. Teachers must not only master the art and practice of teaching, but they must also stay current in the technical content of the profession. Teachers must have professional development plans that allow them to stay abreast of recent developments in the field of agriculture. Even the best teachers become ineffective when the technical content of their lessons becomes outdated.
  
7. Focus on the whole student. Agricultural education must also consider the whole student in the development of the curriculum. Students must have experiences that allow them to grow intellectually, physically, and socially. For a well-rounded instructional program, FFA is needed to provide experiences in teamwork, leadership, cooperation, conflict resolution, management, and interpersonal communications. The agricultural industry requires workers who can cooperate with other individuals in carrying out the goals of an organization. Those individuals who are deficient in social skills are at a disadvantage.

Agricultural education was originally meant for those students who planned to enter the farming profession. With the passage of the Vocational Education Act of 1963, the scope of agricultural education was broadened to include training in nonfarm agricultural occupations. Students were now receiving instruction in agricultural sales and service, horticulture and natural resources, and other nonfarm occupations. This was a major legislative enactment shaping new curriculum areas in agricultural education. Agriculture became a universal subject, and agricultural education was charged with the responsibility for agricultural literacy among all students. Agricultural education is a subject worthy of inclusion in every school at all grade levels—from kindergarten through the twelfth grade. The positive effect that agricultural education programs have had on thousands of youth is something to be shared with all young people.

To become a voice for agricultural literacy at all grade levels and in every classroom requires significant change on the part of the agricultural education profession. The program must change to meet the needs of a diverse student body, and the current technology of agriculture must be visible in the instructional program. A local agricultural education program that is hindered by outdated equipment, outmoded instructional techniques, and a narrowly focused curriculum will drive students away. Many high school students expect to attend some form of postsecondary institution, and the curriculum has shifted somewhat to incorporate academic subject matter within the context of the agricultural sciences. Accordingly, supervised experience programs should be focused on knowledge acquisition with

an appreciation for financial earnings. This has paved the way for research and inquiry-based supervised experiences.

As the twentieth century came to a close, agricultural education kept building upon its philosophical foundation by continuing to concentrate efforts on career guidance. The focus of agricultural education has shifted from training in specific jobs to training in career clusters or pathways. The great technological advances of the 1990s rendered training for specific jobs nearly obsolete. Today the focus of agricultural education is to provide learning experiences clustered around general agricultural areas, such as horticulture, engineering, and natural resources. The advances in biotechnology have changed the face of agriculture in the United States and around the world. To address the rapid advance of technology, agricultural educators have had to look beyond the jobs and careers of today and focus on the careers of the future. Students entering the agricultural education classroom will choose among emerging career opportunities in the agricultural industry.

Today, agricultural education no longer provides vocational training solely for those students who will be farming or entering the agricultural industry workforce upon graduation from high school. Agricultural educators are now preparing students for higher education experiences in science, business, and government. In spite of the advances vocational education has made in the last 100 years, change seems to be the only constant. As agricultural education enters the twenty-first century, it must change with emerging trends in society and the agricultural industry. Although most Americans know very little about the agricultural industry, they do know what it feels like to enjoy wholesome food and have good clothing. It is therefore necessary that the profession continue to provide educational experiences for the students of today and for the farmers, agricultural scientists, and agribusiness leaders of tomorrow.

### Leadership defined

I define leadership as the influencing of a person or persons to achieve outcomes that satisfy the social, emotional, physical and intellectual needs of the members within an organization or society. To accomplish these outcomes, leaders influence followers in a number of ways:

Leaders help followers determine the meaning of external events impacting the organization and lead them to respond in a meaningful way. For instance, the recent Deepwater Horizon explosion and subsequent oil spill in the Gulf of Mexico has caused leaders to encourage citizens to reflect on how ready the Gulf States are to mitigate the effects of oil pollution in coastal waters. This reflection has caused coastal municipalities currently unaffected by the oil spill to make preparations for oil pollution cleanup.

Leaders also influence the process of choice-making. Leaders help followers determine a list of alternatives that will potentially achieve a desired outcome, then lead followers to select the best choice possible. As part of choice-making, Leaders are able to provide an environment conducive to motivated effort, and establish mechanisms that encourage and maintain trust. Leaders are "rainmakers" of a sort. That is, they have the ability to marshal resources, coordinate work activities, and facilitate effective management strategies. An example of how leaders do this can be found every four years in the United States with the inauguration of a new president. Each new president brings into office the staff and resources necessary to accomplish preferred outcomes.

Leaders influence followers because they are teachers. They help followers develop skills and abilities, and facilitate the dissemination of new knowledge of benefit to followers. Leaders are encouragers who build a collective vision for the future. This requires that leaders share the same beliefs and values as the followers they lead. Perhaps this principle can be best explained through the example set by Martin Luther King, who put into action the mechanism of non-violent protest as a means to end racial segregation in the American South.

Finally, leaders represent the shared goals and values of followers to the outside world. If they are effective in telling their organization's story, they build effective partnerships with organizations with similar goals and values. The chief executive officer of almost any major university assumes this role by telling the story of the university, and partnering with alumni and sponsoring organizations to provide the resources for the university's mission.

### **A Viewpoint on Leadership Theory**

Practically all of the widely held contemporary leadership theories have some utility depending upon what the leadership educator is researching. For instance, contingency theories assist evaluators in determining how leader behaviors influence progress and achievement in an organization. Leadership theories are the tools in a leadership educator's tool box; useful for research and evaluation of leadership education programming and for examining leader effectiveness in organizations. Organizations use leadership theory to affirm the mission of the organization, establish goals, direct operations, and maintain the organizational culture. Because leadership becomes most apparent in organizations, I tend to devote most of my resources toward examining leadership in the organizational context. I view organizational leadership as a four-component structure:

### **Organization Mission and Purpose**

The organization's mission and purpose provides the context through which leadership is provided. The leader makes the mission and purpose of the organization apparent to followers and to external partners. Transformational leadership theory guides research in this area.

#### **Goals**

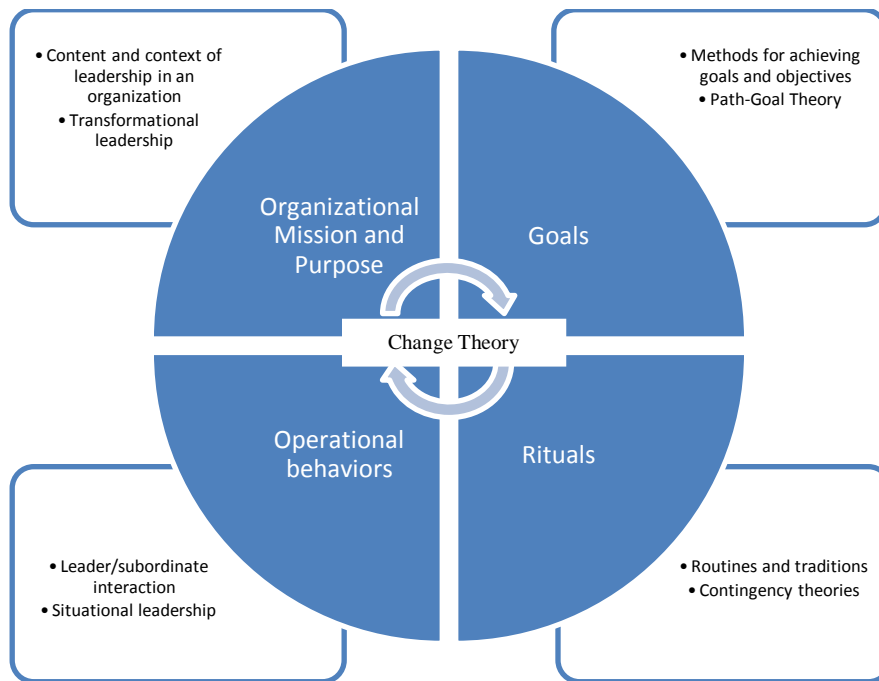
Organizational goals are where the mission and purpose are manifested, and where the most important choice-making occurs. Once goals are established, the leader provides the management structure and resources most likely to garner successful goal achievement. The Path-Goal Theory, is an example of how leadership theory can guide research and practice in this area.

### **Operational behaviors**

Within most organizations, a bureaucracy develops as goal achievement becomes more complex and as the number of followers increases. As organizations become more complex, so does the leader-subordinate relationship. For instance, within certain organizations, the farther away followers perceive they are from their leaders, the more likely they are to develop their own goals and objectives. Situation leadership theory can be a useful guide to research into the leader-subordinate relationship.

## Rituals

Most established organizations have rituals. In the area of agricultural and extension education, most leaders are familiar with the traditions associated with the National FFA Organization and 4-H Youth Development. The leader is aware of the traditions in an organization and can utilize them to maintain trust, and develop commitment to the organization's mission and goals. In some cases, routines are helpful in maintaining focus on the mission, and at other times routines can make organizational change difficult to accept.



Within this four component model, social change theory helps to explain the natural process of constant change inherent to organizations. Internal and external events occur constantly to shape the mission, goals, behaviors and rituals within an organization. In order for organizations to survive, they must have leaders and followers willing to accept and carry out change.

I believe that the study of leadership is vital to the success of the agricultural industry and for the conservation of natural resources. The world's population is estimated to go beyond nine billion people by the year 2050, which is approximately a fifty percent increase in the current world population. The agricultural industry must have effective and sound leadership in order to meet the challenge of feeding this growing world, and shepherd the practical and wise use of natural resources. To paraphrase the well-known Chinese proverb, "Providing leadership in agriculture to the world helps feed the world for today. Teaching others to lead ensures that enough food, fiber, and natural resources will exist for a growing world tomorrow."