HUMAN RESOURCE MANAGEMENT IN COLLEGES OF AGRICULTURE: HOW'D WE OVERLOOK THIS ONE?

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An applied paper, submitted to the 23rd International Farm Management Conference.

IFMA23 Theme: Leadership and organization (Organization perspective); Labour force of the future (family farmers, young entrants, succession, influences of the family)

Word count: 3,017

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Human Resource Management in Colleges of Agriculture: How'd we overlook this one?

Abstract

Training in the management of the human resource in agricultural education has been long overlooked. While people remain one of the most important resources in agricultural production, an informal survey of 1862 Land Grant Universities in the United States found that only one in six Land Grants had a course dedicated to Human Resource Management in Agriculture. Another thirty-four percent address HRM as a component in another course, but fully half of the 1862 Land Grants do not teach students how to manage people. This paper examines some of the historical underpinnings of this oversight and efforts and methods to address the issue.

Keywords: human resource development, agriculture, undergraduate curricula, personnel management, college of agriculture, 1862 Land Grant University, Kentucky

Introduction

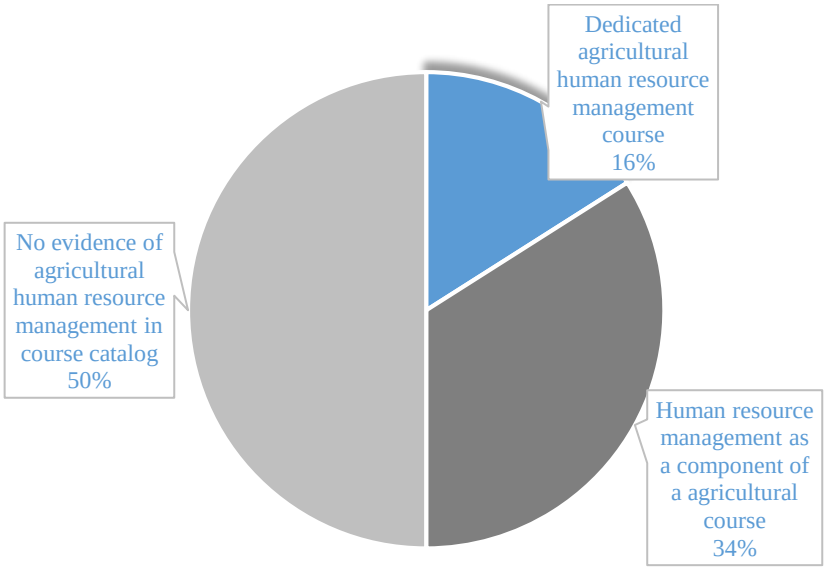
Agriculture, as an industry, is unique in its practicality and tradition. Colleges of agriculture focus on research-based scientific problem solving (National Research Council, 2009). The Land Grant mission is comprised of three components: learning, discovery, and engagement all of which are focused on instilling practical knowledge (University of Kentucky, 2022). Land Grant University colleges of agriculture have done a stellar job of educating undergraduates in the agronomic, economic, and animal focused disciplines. Yet, managing our human resources is often only a component of a course or has been outsourced to a different college. Utilizing the expertise of other colleges allows students to learn outside the silo of the ag industry, however with its distinctive challenges and strengths, the industry merits dedicated focus on the economics of humans.

Seldom would a college of agriculture graduate come across a challenge that they have at least not heard of, or considered, or addressed. Until they start managing people. Cows and crops, machines and markets, bugs and diseases, all seem easy compared to the challenge of managing people.

It's as if we never considered that without people, the soil, sun, and seeds will not produce enough to support more than the hunter/gatherer economy of our distant ancestors. An agriculture that feeds the world did not happen, nor can it be sustained, without the efforts of people.

Prevalence of Course Availability

Informal research of the 1862 Land Grant Universities in each of the fifty United States was conducted to determine the prevalence of agriculturally focused curriculum in human resource management. Via online searches on institutional websites, perusals of course catalogs, and e-mail conversations, it was determined that sixteen percent of the surveyed institutions have a course dedicated to human resource or personnel management in the agricultural industry. Thirty-four percent of institutions provided human resource management as a component of a broader agricultural or farm management course. These broad courses focus on financial and investment management. There was no evidence of any agriculturally specific human resource development curriculum in fifty percent of the surveyed institutions.



The prevalence of human resource development course availability, specific to the agricultural industry, at 1862 Land Grant institutions. Full list of institutions available in Appendix 1.

Why was HR left out of agricultural curricula?

For much of our history the people in agriculture all knew one another, usually by being related. Families were the management and labor, at least on the production front. Roles and responsibilities were hierarchical, typically patriarchal, and often assumed to be genetically transmitted from generation to generation. Labor was raised not hired, told not trained, housed and fed, but not paid. The tendency to undervalue unpaid labor and to assume that family members were obligated to work for their keep, probably contributed to the notion of not worrying too much about "managing" the labor. Keeping them fed, protected and busy (idle hands are the devil's workshop) were more of a concern than making sure subordinates knew the facets of their job descriptions. If the only workers are family, why bother with detailing skills, requirements, and instructions?

In the formative years of land grant curricula, labor would not have been considered a problem to be addressed except perhaps for how to deal with an excess supply. Economic conditions and technological change led to massive out migration from American farms. The rural sociology of the early 20th century examined the domestic migration patterns as millions of farm workers relocated to cities and their manufacturing jobs. According to Carol Boyd Leon (2016) , in 1910 nearly 31% of the U.S. workforce was employed in farming, 11.5 million people. By 2015 farming accounted for only 0.7% of the workforce, employing about one tenth as many workers as in 1910 (2016).

In the development stages of land grant universities, the focus was on improving the yields and quality of the farm production. Attention to the agronomic production practices and the research in genetics and fertility generated returns far in excess of the costs of the research. Similarly, science-based improvements in nutrition, disease prevention, and breeding stock led to better production on the animal side. By the early 20th century tractors began to replace the "horse power" that had been the staple of production agriculture since the first human figured out how to harness a horse and till the soil with something other than a hoe. Larger tillage tools, mechanized planters, and harvesters began to reduce the amount of manual labor required on farms.

Somewhere along the way economists began to join the agronomists, animal scientists, and ag engineers who were leading the agricultural research revolution. Early economic research and analysis was labeled "farm management" and primarily centered on "counting things" and measuring profitability. Farm management was not without its social science component,

but that tended to focus on the values of thrift, integrity, and hard work. Early texts explored the farm "life cycle" with its entry, growth, and exit phases. Entry was by tenancy or birth, growth was more realistically sustaining the farm, and exit was by death with transition to heirs or the tenant. The labor model was still family focused. The farm management texts from their inception in the early 1900s till today would generally include a chapter about farm labor, but evidence of a "farm labor management" text is nowhere to be found.

Evidence in the research literature, extension publications and programming at the farm level, and texts and classes at the college level specific to agronomy, animal science, engineering, and economics abounds. People management received only passing mention in a farm management class or an occasional extension publication until the last quarter of the century when a few specific courses began to appear with offerings by Dr. Robert Milligan at Cornell University and Dr. Bernie Erven at the Ohio State University being notable examples.

Meanwhile most ag college graduates found themselves well equipped in the sciences and economics and woefully unprepared to acquire, train, and manage the human resources, a task described this way, "Rocket science is easy, It's managing people that's hard." a quote made more meaningful because it was made by a rocket scientist, Jay Levine, Aerophysics Branch Chief at Edwards Air Force Base (Rosenberg, 2012, p. 1).

Little research has been done in the field of human resource management, motivation, and non-financial aspects of transition-planning. Unsurprisingly then, there are few experts studying the social economics of humans in the agricultural industry. Those that have been teaching have often seen the need and have fulfilled it with lived experience and enthusiastic self-qualification. Luckily, the field seems to have attracted the interest of new scholars, dedicated to the topic, and will likely provide robust applications for farms and agribusinesses in the coming years. Today's practical academics are hoping to offer research-based rationale for changing the traditional mindset that HRM on the farm is a token job to give the newest daughter-in-law, and instead encourage agriculturalists to consider it a core business competency.

The Kentucky Experience

Agricultural Management Principles, AEC 302, is a four-credit hour course that would have been known as Farm Management a few generations back. Students have evolved, and so has

the class. Less than one-third of the current cohort (Spring 2022) report farm or rural non-farm as their background. A farming future not on the horizon for most of the students. AEC 302 is a Core (i.e., required) course in Agricultural Economics at the University of Kentucky, and is also a required course for three other majors in the College. This high demand course is taught by multiple instructors and includes the basics… strategy, planning, budgeting, financial management, investment analysis. Depending on the instructor, the course may or may not include a human resource component. The sections taught by co-author Isaacs have always included a human resource management (HRM) component. From a single lecture session, the course has evolved to a point where about one-fourth of the semester is dedicated to the principles and applications of managing the human resource.

Beginning in 2010 a course was added to the Agricultural Economics curriculum devoted entirely to HRM. Human Resource Management in Agriculture, AEC 340, is an elective course in Ag Economics and for any other majors in the College. It meets capacity limits in both Fall and Spring semesters with more than half the students coming from other majors.

The impetus for development of a dedicated HRM course came largely from feedback from alums of the AEC 302 sections. Graduates reported comfort with the technical and production components of their jobs, but extreme discomfort and lack of preparation for managing the people who came along with the other responsibilities of their new vocations. Those who had been exposed to a bit of HRM reported universally that they wish they'd have had more. Economists tend to respond to demand, and an HRM course was born.

At this point one of the obvious reasons that HRM is not widely taught in ag colleges became apparent. Like the students they are graduating, ag professors generally don't have skills or training in HRM. To the rescue came work from Billikopf, (Labor Management in Ag, 2003) and Rosenberg, et al 2002 (Ag Help Wanted, 2002). The Canadians were helpful as well, Owen, et al (British Columbia Farm Employers Handbook, 1993).

AEC 340: Human Resource Management in Agriculture Course Description

An overview of the management of the human resource in an agricultural context. Major components will include the acquisition, training, motivation, compensation, performance evaluation, and retention of the agricultural labor force. Other topics include the legal and taxation components of hired labor and working with a multi-cultural and multi-generational work force.

University of Kentucky, AEC 340 Syllabi. Co-authors and instructors, Brown (2021) and Isaacs (2022).

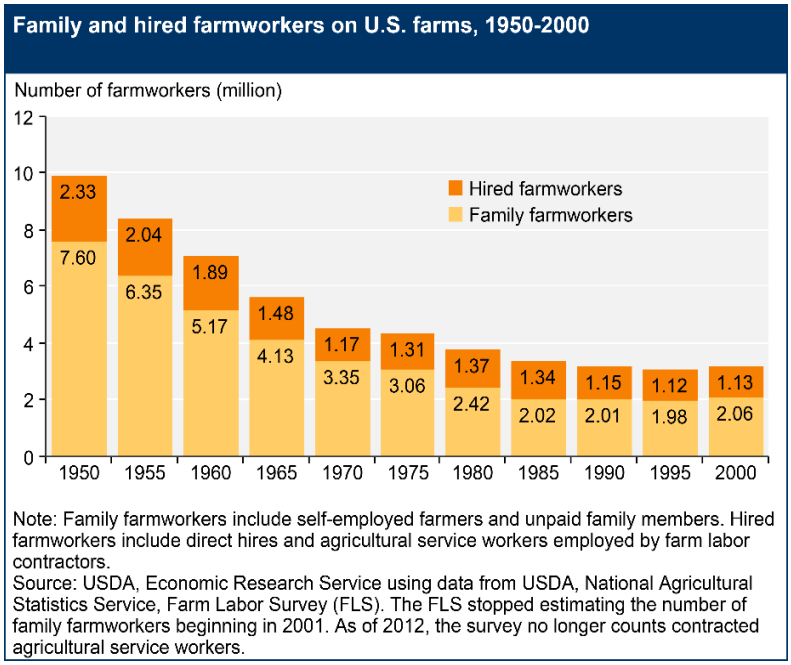
In some semesters, where clear vocational preferences of students can be identified, teams of students are created around their preferences (e.g. equine, crop production, agricultural retail and/or implement sales, agritourism) (Isaacs, 2022). Student teams create an acquisition plan for a fictitious position, which includes writing a job description, developing recruitment strategies, drafting interview questions, detailing onboarding and training plans, and considering the pros/cons of compensation and performance management plans (Brown, 2021).

This reality-based approach engages students in the tactical elements of HRM that they will encounter upon entry to the workforce. Additional emphasis is placed on soft skill development in topics such as motivation theory, team building, cognitive style, conflict resolution, leadership and management styles, and generational differences (Brown, 2021, Isaacs, 2022). Several formal and informal self-assessments are used in the course. Incoming industry leaders who are committed to understanding their strengths and limits, are open to criticism, and strive for continual improvement are poised to find success in any industry. Students are also tasked with responding to difficult personnel situations, including theft, insubordination, and interpersonal conflicts. As a result of the hands-on approach, student evaluations have ranked well above college and university norms, and the post-graduate feedback has been quite positive.

Why is HR in agriculture important?

Families continue to supply a substantial portion of farm work force. Early evidence from USDA's Farm Labor Survey (2021) suggested that families provided about three-fourths of the farm labor supply in 1910. This was still the case as late as the 1950s, although the total numbers had fallen by about a third. USDA's FLS stopped estimating the number of family farmworkers in 2001. At the last accounting in 2000, families still provided nearly two-thirds of the workforce, but total numbers had fallen to about three million.

The distinction between family and hired farmworkers may make the human resource management issue more, not less, difficult. Traditional organizational development research and education focusses on corporate, industrial, or service sectors where family labor, and the concurrent family dynamics are not the norm. Ag HR must, by necessity, consider family and intergenerational factors and the dynamics of the family/hired interface.



For more than twenty years, a small group of academics has been collaborating about human resource development in agriculture. Most members of this informal cohort are extension professionals, and therefore are often on the farm speaking with operators. Led by Dr. Bob Milligan, Professor Emeritus at Cornell, the group has been nurturing incoming professionals' interest in the field, aided in recent years by the expansion of virtual meeting capabilities. Discussions in the quarterly sessions are often about complicated interpersonal issues, unique to the agricultural industry; for example, group dynamics among new and returning H2A employees, family conflict as a new principle operator begins to take over decision-making (and managing siblings), or the likelihood of success in implementing a strategic feedback schedule with employees who abhor formal meetings. The distinctive challenges in the agricultural industry require imaginative solutions, and collaboration is often critical to creativity. Hearing what other farm advisors have seen, tried, and experienced is one of the best ways for young enthusiasts of the field to learn and innovate.

While only sixteen percent of the surveyed institutions had an agricultural course dedicated to developing and managing personnel, this project has served as a catalyst for conversation. Several individuals expressed an interest and exchanged syllabi. One institution is working on a needs-based proposal for the Agricultural Leadership program, citing this as an opportunity for undergraduates. Communities of agricultural human resource development advocates and educators are expanding with the help of young scholar interest, needs-

acknowledgement, and the ease with which people across the nation, and globe, can communicate with technology. These informal networks could enhance leadership on the farm, leading to increased financial and familial success for generations of incoming undergraduates.

Conclusion

Each year land grant colleges of agriculture will graduate a few thousand students well educated in the sciences and liberal arts. Because of their training and aspirations and the jobs they will find, many will be managing people sooner or later. Most will find themselves surprised at the difficulty of the task and without a shred of preparation. On the job training is a costly proposition, especially when a good bit of the cost of the errors is denominated in the emotions and well-being of all involved. People are the most important of all the factors of production; management of our human resource has been given short shrift. Agricultural colleges have exceled at teaching students technical skills and how to manage financial and natural resource. Incorporating skills regarding the management of our people is long overdue.

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Appendix 1

STATE	*INSTITUTION*
Alabama	Auburn University, Auburn
Alaska	University of Alaska, Fairbanks
Arizona	*University of Arizona, Tucson*
Arkansas	University of Arkansas, Fayetteville
California	*UC Davis, Davis*
Colorado	*Colorado State University, Fort Collins*
Connecticut	University of Connecticut, Storrs
Delaware	University of Delaware, Newark
Florida	*University of Florida, Gainesville*
Georgia	University of Georgia, Athens
Hawaii	University of Hawaii, Honolulu
Idaho	University of Idaho, Moscow
Illinois	*University of Illinois, Urbana*
Indiana	Purdue University, West Lafayette
Iowa	Iowa State University, Ames
Kansas	Kansas State University, Manhattan
Kentucky	*University of Kentucky, Lexington*
Louisiana	Louisiana State University, Baton Rouge
Maine	University of Maine, Orono
Maryland	University of Maryland, College Park
Massachusetts	University of Massachusetts, Amherst
Michigan	Michigan State University, East Lansing
Minnesota	University of Minnesota, St. Paul
Mississippi	Mississippi State University, Starkville
Missouri	University of Missouri, Columbia
Montana	Montana State University, Bozeman
Nebraska	University of Nebraska, Lincoln
Nevada	University of Nevada, Reno
New Hampshire	University of New Hampshire, Durham
New Jersey	Rutgers University, New Brunswick
New Mexico	New Mexico State University, Las Cruces
New York	Cornell University, Ithaca
North Carolina	North Carolina State University, Raleigh
North Dakota	North Dakota State University, Fargo
Ohio	Ohio State University, Columbus
Oklahoma	Oklahoma State University, Stillwater
Oregon	Oregon State University, Corvallis
Pennsylvania	Pennsylvania State University, University Park
Rhode Island	University of Rhode Island, Kingston
South Carolina	Clemson University, Clemson
South Dakota	*South Dakota State University, Brookings*
Tennessee	*University of Tennessee, Knoxville*
Texas	Texas A&M University, College Station
Utah	Utah State University, Logan
Vermont	University of Vermont, Burlington
Virginia	Virginia Tech, Blacksburg
Washington	Washington State University, Pullman
West Virginia	West Virginia University, Morgantown
Wisconsin	*University of Wisconsin, Madison*
Wyoming	University of Wyoming, Laramie

Institutions with a dedicated human resource development program focused on the agricultural industry are italicized.