This discussion of the current state of the land grant university first looks at the past to see the origins of land grant universities and their original purposes. Then, each of the three components of land grant institutions is explored: teaching, research, and extension. At present, the quality of teaching at land grant universities is of some concern, although the quality and variety of degree options is high. Whether land grant universities are meeting the original intention of providing an education for the common man is an interesting question; this function may be met today by community colleges. Land grant universities have excelled in research and continue to do so. The case may be made that the extension services have had unparalleled success in achieving the original purpose of diffusing practical information to the people of the state. However, the future of extension is uncertain. Land grant universities face interesting dilemmas about teaching and challenges in setting research agendas. Extension is the area most likely to face difficult issues in the future, especially in light of the decreasing population directly involved in agricultural production. (Contains 12 references.) (SLD)
The Current State of the Land Grant University System

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Introduction

To assess the current state of the land grant university, we must first look at the past to see where it came from and its original purpose. Throughout this paper, content will be separated into sections dealing with each of the triadic components (teaching, research, and extension) of the system (see Figure 1). Once a thorough understanding of the historical foundations is accomplished, each component will be evaluated to determine its current status. Finally, important issues for the future as identified in the consulted literature will be discussed.

Figure 1. Triadic Mission of The Land Grant University

Historical Foundations

Teaching

There is some debate as to the exact genesis of the land grant idea (Herren & Edwards, 2002). However, the concept of a state university that specializes in the education of common
people in the agricultural and mechanical sciences is often attributed to Jonathan Baldwin Turner of Illinois (Herren & Edwards, 2002; Herren & Hillson, 1996). Other universities of this time were devoted to the study of philosophy, theology, history, and other classical studies. Scholars have also hypothesized that Turner had secondary motives for these universities (Herren & Edwards, 2002). Turner believed that a democratic government requires educated citizens. The common people did not have access to the universities of the day, thus only a section of the population was educated.

Turner did not have sufficient political clout to secure passage of legislation to establish these universities, so he solicited the support of Justin Morrill, a congressman from Vermont (Herren & Edwards, 2002; Herren & Hillson, 1996). Morrill introduced legislation on several occasions to create these universities, each time failing. The catalyst that ultimately led to the creation of the land grant universities was the Civil War and the withdrawal of the southern representatives and senators from the Congress. The Morrill Act was signed into law on July 2, 1862 by President Abraham Lincoln. Further legislation was passed in 1890 (the second Morrill Act) to provide access for African-Americans and 1994 (Elementary and Secondary Reauthorization Act) to provide access for Native Americans through community colleges on tribal reservations (Herren & Edwards, 2002; University of Florida, 2000). These legislative acts created the first component of the triadic mission, teaching.

Research

The above-mentioned legislation allowed for teaching of the agricultural sciences. During the decades following passage of the first Morrill Act, land grant institutions were formed and began teaching agricultural sciences. However, at the time, there was little scientific knowledge
related to agriculture (Herren & Edwards, 2002). This deficiency in knowledge led to the creation of the Agricultural Experiment Stations by the Hatch Act of 1887 (Herren & Edwards, 2002; University of Florida, 2000). The role of these experiment stations was to discover and disseminate scientific knowledge related to agriculture (Campbell, 1995; University of Florida, 2000). Thus, the second component of the triadic model (see Figure 1) for the land grant system was in place.

Extension

Despite the mission of providing an education to the common people, many people still did not have access to the teaching and research conducted at the land grant institutions (McDowell, 2001). In 1914, the Smith Lever Act was passed, which created the cooperative extension service. The purpose of the extension service was to disseminate information from the land grant universities (Herren & Edwards, 2002; University of Florida, 2000). There is, however, some debate as to exactly who today's audience of the extension service is (McDowell, 2001). Regardless, this legislation now completes the triadic model for land grant universities that includes teaching, research, and extension (see Figure 1).

Current Status

Teaching

The quality of teaching at land grant universities is of some concern (Dean & Camp, 1998). However, the existence of organizations such as the North American Colleges and Teachers of Agriculture (NACTA) that holds conferences and publishes journals that aim at improving instruction and the Teaching Resource Center of the College of Agricultural and Life
Sciences at the University of Florida that publishes newsletters, holds symposiums, and consultations are two examples of efforts to improve instruction. A contributing factor to this concern about teaching quality is the fact that many doctoral programs in technical agriculture areas do not require pedagogical or andragogical coursework for degree completion (University of Florida, 2002). Once these graduates are employed as faculty members, a lack of faculty reward for teaching excellence may also contribute to this problem (Byrne, 2000). Another facet of this concern may be that many faculty members have complicated appointments that involve teaching, research, and extension. Given the breadth of their duties, some faculty members may not have sufficient time to devote to teaching. However, on a positive note, McDowell (2001) indicated that when faculty members conduct research it does not affect the quality of their teaching.

Regardless of the concern for instruction, the quality and variety of degree options for students is also high. As a result, applicants to land grant universities greatly out number the available slots for admissions at many land grant institutions. Consequently, access to land grant universities is increasingly difficult with stringent admission standards that eliminate many students. Therefore, many students must enroll in a community college for the first two years and then transfer to a land grant university for the remaining two years of their degree program or elect to enroll in a non land grant university. A complicating factor of these rigorous admission standards is the impediment to diversity in student enrollment (Byrne, 2000).

This situation provides an interesting dilemma. Are today’s land grant universities meeting their original intention of providing an education for the common man? Some would argue that community colleges now serve this role and the land grant universities are thus
relieved from this charge while others refer to the original ‘Social Contract’ that provided the land grant university its mission over 150 years ago (McDowell, 2001).

Research

Land grant universities have excelled in research. This is indicated by the inclusion of 43 1862 land grant universities in the Carnegie Foundation’s list of the top 125 research universities in the country (McDowell, 2001). Twenty-two of the 43 are listed as the highest level, “Research I”, that a university can achieve. The remaining land grant universities are classified as “Doctoral” universities.

McDowell (2001) argues that this is misleading. Much of the research conducted by the agricultural experiment stations is guided by special interests or towards impressing the researchers’ colleagues at other institutions, not the practical problems faced by agriculturalists in the state that the land grant university is supposed to serve. He goes further to blame the current promotion and tenure practices that reward faculty for scholarly publications for the land grant universities’ infatuation with research. Regardless, the contributions to knowledge about agriculture that are directly the result of the land grant universities have shaped the agricultural industry and the country as a whole in to the highly productive industry that it is today (Kellogg Commission, 1999; Massey, 1994).

Extension

Arguably, the extensions service has had unparalleled success in achieving its original purpose of diffusing practical information to the people in the state (McDowell, 2001). The tremendous advances in agricultural production and the standard of living among rural citizens
are examples of this success. However, many people today argue that extension has lost its original focus of serving farmers and their families (McDowell, 2001). They argue that many of the social programs undertaken by extension have nothing to do with agriculture and in fact utilize resources that should be used for agricultural programs. Nevertheless, the past success of extension is non-debatable, the future, however, is uncertain.

Future Implications

Teaching

The literature consulted for this paper reveals several interesting dilemmas that land grant universities will face regarding teaching. The debate concerning access to education at land grant universities by the ‘common man’ will continue to present challenges (McDowell, 2001). A by-product of the access concern is the increased demand for delivering distance and continuing educational programs and the related issues that this involves (Ramp & Guffey, 1998). These universities will also continue to face difficulties regarding demographic and ethnic composition of their faculty, students, and staff (Massey, 1994; Rampp & Guffey, 1998). McDowell (2001) also makes a strong case that the current promotion and tenure policies of many land grant universities create an environment that does not encourage excellence in teaching. A final problem is the room for improvement in partnering between land grant universities and K-12 education (Byrne, 2000).

Research

The quality of research will not be a dilemma. However, setting a research agenda will present some challenges (McDowell, 2001). Land grant universities will be required to determine
if academic disciplines or local needs shall direct the research conducted under their umbrella. Another research related issue faced by some academic disciplines at land grant universities is the lack of research focus by many researchers (Cheek, 2001). Cheek charges that the Agricultural Education discipline does not have a clear research focus and that many researchers need to reconsider their research agendas.

Extension

Of the three areas of the triadic model, extension will likely face the most difficult issues in the future (McDowell, 2001). Given the decreasing population directly involved in agricultural production, the role of extension will provide many challenges to the land grant university (McDowell, 2001). One possibility for the future is with the increasing call for community support, public service, and outreach campus wide, the extension service has a unique opportunity to capitalize on what it does best, service (Massey, 1994; McDowell, 2001).

These important implications for the future of teaching, research, and extension in the land grant universities will require changes to the current mindset and university practices. However, reform will not be easy. In a post study of the Kellogg Commission’s report, lack or resources (money and time), inadequate facilities, university organization (into decentralized disciplinary departments), lack of communication between academic units, personal attitudes, and resistance to change were identified as barriers to reform (Byrne, 2000). This task will require the next generation of scholars, university administrators, and politicians to be knowledgeable of the history of the land grant university and have a clear vision to where it needs to be in the future.
References


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