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## UNDERGRADUATE EDUCATION IN DEPARTMENTS OF AGRICULTURAL ECONOMICS IN THE SOUTH: STATUS, CHALLENGES, AND OPPORTUNITIES

John Adrian

I am pleased to have the opportunity to visit with you and to share information and ideas concerning undergraduate education in agricultural economics in the South.<sup>1</sup> From the time I learned that I would make this presentation, I gave much thought to an appropriate topic.

Last winter, I was assigned the task of serving as chairperson of a departmental committee charged with the responsibility of evaluating our undergraduate curriculum. Like many other departments, we had experienced a declining enrollment. Thus, we questioned the relevancy of our program in meeting the needs of students and, ultimately, clientele. In the process of revising the curriculum, several faculty in other agricultural economics departments were contacted and questioned about their undergraduate programs. Surprisingly, many of these individuals had just undergone, were involved with, or were contemplating a reevaluation of their own undergraduate programs. Discussion led to more questions than answers. Thus, the topic of the 1990 SAEA Presidential Address emerged.

Clearly, the discipline, at least as it regards undergraduate education, is undergoing a reevaluation and transition. The purpose of this address is to define the status of undergraduate education in agricultural economics in the South and to identify and discuss some of the opportunities and challenges that will face us as we proceed through the 1990s and confront the twenty-first century.

Discussion concerning the status of programs is largely based on information provided by 15 southern department heads or their representatives.<sup>2</sup> I am greatly indebted to these individuals and wish to recognize their contribution to this effort. Basically,

the information from departments focused on enrollment trends, a profile of students, faculty resources and rewards and incentives, and the nature of undergraduate programs. This presentation will address the same issues with emphasis given to status, opportunities, and challenges in each of these areas.

### ENROLLMENT TRENDS AND A PROFILE OF STUDENTS

#### Status

I suspect the prime factor motivating the intense concern about our undergraduate programs was the decline in enrollment experienced in recent years. Without these shifts, a few departments might have made cursory adjustments in their programs. However, the wholesale reevaluations that have occurred or are being undertaken would not have been experienced. These adjustments show that the results of adversity and change are not always bad. Those departments that have responded to the challenge of enrollment declines are now better addressing the needs of students and clientele.

Analyses of recent enrollment data have consistently shown declines for colleges of agriculture. For example, a 1989 report by the National Association of State Universities and Land Grant Colleges, which included data from 64 institutions, indicated that undergraduate enrollment in the agricultural sciences fell by 32.7 percent between 1980 and 1988 and 18.6 percent during the last five years. Adjustment in enrollment for the Agricultural Business and Management grouping for these institutions was slightly more pronounced for the 1984-1988 period at 20.5 percent. Keen presented data for 36 universities from which changes in enrollment at southern

<sup>1</sup> Throughout this paper, the term agricultural economics will be used broadly to encompass degree programs named agricultural economics, agribusiness, food and resource economics, and similar designations.

<sup>2</sup> Individuals at Arkansas, Auburn, Clemson, Florida, Georgia, Kentucky, Maryland, Missouri, Mississippi State, North Carolina State, Oklahoma State, Southern, Tennessee, Texas A&M, and Texas Tech provided data concerning their undergraduate programs.

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institutions could be extrapolated and evaluated (p. 6). Using these data for 16 southern universities, college of agriculture undergraduate enrollment declined 32.3 percent between 1980 and 1988 and 6.7 percent between 1985 and 1988.

According to the survey of the 15 departments of agricultural economics in the South, enrollment increased 47 percent from 1975 to 1980 and declined 8 and 17 percent for the 1980-1985 and 1985-1988 periods, respectively. College of agriculture enrollment for these institutions was consistently down for these time periods (-6 percent for 1975-1980, -26 percent for 1980-1985, and -5 percent for 1985-1988), while university enrollment was consistently up (11 percent for 1975-1980, 11 percent for 1980-1985, and 4 percent for 1985-1988).

These relationships tend to indicate that enrollment adjustments for undergraduates in agricultural economics lagged those noted for the college as a whole and were somewhat less pronounced. Keen's analysis adds credence to this contention in that agricultural college deans who were surveyed noted a disproportionate impact among disciplines. The deans indicated that agricultural economics had been least impacted by the agricultural environment and poor agricultural image of the last few years. Increased emphasis in the sales and marketing areas of agribusiness was credited for the positive status.

There is much diversity among the backgrounds of undergraduate students in the discipline in the South. Averages for the 15 surveyed departments indicate that half of the students enrolled had rural backgrounds while only 12 percent had farm backgrounds. By individual departments, these rates ranged from 15 to 90 percent for rural background and zero to 33 percent for farm background. On average, 38 percent of the students enrolled in the program as freshmen, while 43 and 17 percent enrolled after on-campus or off-campus transfers, respectively.

With more than half of the students enrolling in the discipline on a transfer basis, recruitment would seem to be a necessary departmental function. However, only two departments have a formal recruitment program. Most recruitment effort is coordinated at the college level with departments participating in "career days" and providing a recruitment brochure or input into the college recruitment packet. One of the departments having a formal recruitment program had a faculty member who was assigned responsibility for recruitment.

Scholarships can affect enrollment and retention of good students. All but one of the responding departments had departmental scholarships for undergraduate students. Average total value of schol-

arships per department was \$7,000 and average value per scholarship was \$1,000. Beyond departmental scholarships respondents indicated that students in agricultural economics typically qualified for consideration for numerous scholarships at the college and university levels.

### Challenges and Opportunities

Demographic data do not portend an improvement or solution to the enrollment issue in the coming decade. Manderscheid and Kohl *et al.* identified many of the demographic factors that will affect university enrollments—a smaller pool from which to attract traditional students, the change in family status, the increase in ethnic diversity, a different age mix of students, and the decline in both "middle sized" and total farm numbers. The traditional pool from which college students are drawn is projected to decline by 25 percent by the end of the 1990s (Spitzer). More potential students will come from single parent households and be of Asian, Hispanic, and black ethnic backgrounds—all nontraditional sources of students for the discipline. Also, as adult and continuing education become more prevalent, the average age of students will increase.

On a somewhat positive note, the number of people living in rural areas is at an all-time high, about one of every four persons (The Task Force on Agriculture and Community Viability). Thus, there is some appreciation for rural living and rural issues among a fairly large portion of the population. However, the majority of these residents are not farm oriented. Rural nonfarm residents outnumber rural farm residents by a 10 to 1 margin, and farm residents are outnumbered by the general population by over 40 to 1.

Beyond this, as we have seen with our graduate programs, more foreign students may opt for undergraduate education in the U.S. and at least partially offset expected declines in domestic student numbers. The trend toward more adults attending college may also help stabilize enrollment. Over the last 10 years, adult enrollment increased by a third, and expectations are for greater growth in the 1990s as the post World War II baby boomers opt for more education (Lewis). However, the portion of these individuals who will be attracted to agriculture and agricultural economics is unclear.

The negative enrollment factors tend to indicate that departments may have to increase recruiting activity to foster viability. However, is recruitment in a declining pool of students feasible? Such activity will place increased demands on departmental resources, both financial and faculty. Rather than spread recruiting responsibility across faculty and

possibly dilute other functions, designation of a faculty member or members to oversee and develop the undergraduate program would seem most feasible. Thus, with the administration's support, this person or persons could promote the program and receive recognition for his or her contribution to the department. Recognition and support by the departmental and college administration is imperative. Otherwise, the individual could jeopardize his or her career because university evaluation systems do not typically give appropriate weight to such activities.

I view the enhanced recruiting issue with a degree of concern. Traditionally, academic departments have recruited primarily on the basis of provision of information about the curriculum and discipline. However, with increased enrollment pressures, there may be a tendency to use more persuasive recruitment tactics like those used by businesses to promote a product or service. This type of recruitment raises potential ethical questions.

Recruitment on the basis of provision of information has merit because the discipline has image difficulties; many high school seniors and junior college graduates have little or no idea what an agricultural economist is or does. Agricultural economics has a more academic subject connotation than do many other disciplines such as agricultural engineering, accounting, management, and landscape architecture. Reflecting on the image factor, I believe departments having the agribusiness designation in their titles fared better in recent years in terms of student numbers.

More persuasive recruitment approaches justify a stronger commitment to deliver a particular packet of value to the graduate. If the "promise" is not fulfilled at graduation, what is the department's liability? I do not wish to imply that there is a differential in the commitment to quality in either case. Simply, I believe more of an "implied warranty" has been provided when more active and persuasive recruitment approaches are used.

My preference would be to maintain the informational recruitment approach and broaden activity with more contact with potential students by faculty and current students. Since a majority of our students transfer to the discipline (43 percent from on-campus), service courses can provide the contact needed to initiate a transfer. While I know many faculty members do not like to teach service-type courses, these are excellent vehicles by which to recruit students. Convince your best, most progres-

sive teachers to teach these classes and watch the results. Their dynamic energy for the discipline will influence students by reflecting the real-world applications of the discipline to problem situations. Students will respond. (Obviously, poor teaching has the opposite effect.)

Commensurate with recruiting activity, and of greater importance in promoting the discipline, is the quality of the service being offered. If the program (service) is providing quality training and meeting the needs of individual students and the marketplace, recruitment is made somewhat easier because students will do much of the recruitment through their interaction with other students and individuals outside the university. Thus, relevance and quality of the curriculum to the needs of students and employers is extremely important. Also, changes in the nature and mix of students justify adjustments in curricula to meet the changing needs of graduates and the marketplace. Considerations in this area will be discussed later under the program section.

#### **FACULTY RESOURCES AND REWARDS AND INCENTIVES**

Evaluation of data for the 15 southern departments indicates that, on average, they allocate 27 percent (7.8 of 28.4) of their total full-time equivalents (FTEs) to teaching; for those departments that isolated undergraduate teaching FTEs, 14 percent (4.1 of 28.4) was so allocated.<sup>3</sup> However, there was much diversity in the allocation among departments. Undergraduate teaching seemed to be well dispersed among faculty in the departments, with an average of about half being involved.

If departments assign approximately equal weight to the three functions of a comprehensive university—extension, research, and teaching—the observed proportions of faculty FTEs devoted to teaching seem fairly equitable. That is, as a whole, teaching claims slightly less than a third of the FTEs and this is basically divided equally between undergraduate and graduate levels. Arguments could be provided for a differential allocation of teaching resources based on a larger number of students in the case of undergraduate courses or the complexity of course input for graduate courses. Ultimately, the allocation depends on demands on departmental resources and priorities of faculty and the administration.

All but two of the departments had a teaching evaluation program. Evaluations ranged from fairly

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<sup>3</sup> Undergraduate teaching FTEs may not be representative because most departments do not differentiate between undergraduate and graduate FTEs.

informal to formal standardized university level instruments that were required for each course each quarter or semester plus a peer evaluation every three-year period. The degree of faculty satisfaction with evaluation programs was judged to be positive for 82 percent of the departments. However, several concerns were expressed relative to the evaluation process: (1) students lack ability and background to evaluate course content, (2) evaluations may allow for differentiation between excellent and poor teaching but they are not sufficient to distinguish between the intermediate gradations of teaching quality, and (3) questions are often ambiguous and vague and thus perform poorly in facilitating effective evaluation of teaching performance. One department head noted that despite the shortcomings of evaluation instruments and the process, he believes the information is useful to him in evaluating faculty.

Recognition of quality teaching through presentation of awards was not prevalent at the departmental level. However, all but one college/school and all universities had such programs. The five departments noting awards at the departmental level indicated that student clubs or associations sponsored them rather than an internal peer-evaluated program.

Three-fourths of the departments/universities provided a sabbatical program to allow faculty to enhance teaching effectiveness. Several of these programs were broad-based to foster either quality research or teaching or both.

### Challenges and Opportunities

Necessary ingredients for an effective teaching program are a qualified and dedicated faculty that is provided the proper environment and incentives to excel. While these data generally reflect a positive teaching environment for departments in the South, I have been concerned about attention given to the teaching function by the discipline at various points in my career. We have graduate programs that are basically devoid of attention to the relevance and importance of the teaching function. These departments turn out graduates who may typically accept a position involving 30-50 percent teaching responsibility. The novice professors frequently teach the way they were taught, develop their skills on a trial and error basis, and promote the good and bad teaching approaches from one professorial generation to the next.

While our graduate programs attempt to provide our graduates with the most up-to-date repertoire of research techniques and methods and coach the students through the scientific inquiry process, we are satisfied to allow these students to develop their

teaching skills and an appreciation for the teaching function largely by chance. We need to be more innovative relative to teaching activities in graduate programs and provide some training from those on campus who have expertise in the area.

Once on the job and actively involved in teaching, faculty and the university system may not give adequate attention to or support for undergraduate teaching. Four major commission reports on higher education (the National Endowment for the Humanities, the Association of American Colleges, the Department of Education, and the Carnegie Foundation for Advancement of Teaching reports) reinforce this idea (Peterson). Peterson summarizes these reports by stating that "too little recognition and compensation is provided to university faculty, especially when the university is a primary contributor to the development process" and "there is increasing need for faculty renewal in face of enrollment declines and later faculty retirements."

Further, Sykes' book entitled *ProfScam* provides a scathing attack of the American university system and the professoriate in this regard. He demeans the professoriate as being overpaid and underworked and criticizes them for their reluctance to teach undergraduate courses. He chastises universities for their penchant to use part-timers and graduate teaching assistants who sometimes lack language fluency to teach undergraduate courses. He also condemns universities for not providing reasonable recognition of the teaching function.

While *ProfScam* is an overstatement of conditions in American universities, the book reflects a perception held by many faculty: quality undergraduate teaching is not adequately recognized and rewarded. Frequently, perceptions become reality if they persist and are of sufficient intensity. Administrators must ensure not only by their words but also by their actions that "teaching counts."

As teachers, we need to identify and evaluate innovative teaching methods and adopt those that are effective. This statement does not mean that our current approaches are ineffective, only that we should be open-minded in our quest for methods and approaches that lead to teaching excellence. Similarly, administrators must be conscious of the risks involved in such actions and must be open-minded when they review student evaluations of faculty. They should provide incentives for innovation through support and appropriate awards. Unfortunately, the total results of innovation are not immediately known. This complicates the process and ultimately hinders teaching innovation because of the inherent risks.

Commensurate with teaching innovation is faculty development through sabbatical programs. Few southern institutions seem to have active programs emphasizing teaching sabbaticals. There also seems to be some reluctance on the part of faculty to participate in such programs. It is not clear whether this reluctance is due to insufficient promotion of programs by universities, an implied stigma that the faculty member may incur for not having "kept up" in the discipline, or some other reason. In this informational age with rapid technological development, university teachers need renewal as much as do doctors, lawyers, and agribusiness managers. Sabbatical programs emphasizing teaching need strengthening.

I am encouraged to see that teaching performance is being given more consideration in promotion and tenure decisions. These decisions will become more critical in the next decade due to declining student numbers. According to the National Center of Educational Statistics, adjustments in enrollment over the next decade will reduce full- and part-time faculty needs by 10 percent (Peterson). These shifts could perhaps be more pronounced for agricultural faculty if enrollments continue to shift more relative to other disciplines. Thus, promotion and tenure (especially tenure) decisions must focus on excellence in both research and teaching. Otherwise, departments may be locked into an inflexible mix of faculty expertise that does not match their needs. With potentially reduced faculty turnover and later retirements, effects on departments will be accentuated.

While I have only mentioned research and teaching faculty, the omission of extension is not intended to diminish the importance of extension faculty or the extension function. My belief is that the roles of extension and teaching faculty will shift over the next decade to the point where the distinction between the two becomes more blurred. Both functions involve education but, historically, the clientele have been distinct. However, with increased retraining, continuing and adult education, and a more nontraditional student body in the 1990s and beyond, distinctions between the functions will become less clear. Faculty in the discipline must consider their role in this process.

## NATURE OF UNDERGRADUATE PROGRAMS

### Status

Before analyzing the nature and status of undergraduate curricula among departments in the South, I must admit that definitive statements about the

programs are difficult to make due to problems in deciphering the relationship of course titles and content. Also, the use of available elective hours by students can greatly change exposure to diverse course material. Thus, only general statements are provided.

Ten departments provided information about core or general curricular requirements. Eight of these programs had university-specified general or core requirements and two had none. Two departments were adjusting their curricula to address new core/general requirements and at least one of the universities had a new core/general proposal before the board of trustees for consideration. Core requirements generally ranged from 30 to 60 hours for departments on a semester system and 50 to 60 hours for departments having a quarter system. Three departments had college core requirements that affected curricula designs.

Core/general requirements were fairly consistent among universities with respect to courses in humanities/fine arts, math and natural sciences, and social sciences. Distinctive core requirements among departments were cultural heritage and computer science courses, which were identified by two and three departments, respectively. Foreign language, a frequent topic in discussions of the core/general curriculum, was specified for one department that is in the process of implementing a new core curriculum. The requirement specifies that entering students are expected to already have two years of foreign language training; otherwise, they must take one year of foreign language.

Evaluation of program offerings showed a broad array of majors/tracks/options among departments. For the 12 departments for which detailed curricula listings were provided, departmental offerings of majors/tracks/options ranged from two to eleven. All departments had a program identified as agribusiness and several provided distinct tracks/options in this area. Some departments had quite diverse program offerings, which extended to rural and/or community development, international agriculture, pre-law, and co-majors with other departments such as accounting, crop science, and agricultural education.

Curricula for 12 of the responding departments were evaluated to determine the relative importance of technical agriculture, business school, speech communications, international trade, and computer courses in the overall course requirements. Since the agribusiness option was available at all responding universities, it was selected for the analysis. Technical agriculture and business school courses received approximately equal weight in the agribusiness cur-

riculum with the requirements typically claiming 5 to 10 percent of the hour requirements each and consisting of two to four courses each. This curriculum also typically required one course each in speech communications and computer applications, which accounted for about two percent of the total hours. Two departments had a specific course requirement in the international trade or business area. Free electives varied widely among curricula, ranging from two to seven courses or from 5 to 22 percent of the total requirement. In addition, several departmental curricula provided flexibility through additional elective hours earmarked for business, speech, agricultural, and/or departmental electives.

Three-fourths of the 15 departments provided undergraduates the opportunity to gain practical experience through an intern program. Six of these departments believed their intern program was reaching potential. Eight students per department typically participated in the program in 1988, with the number ranging from 2 to 26 students. An average of 6.3 percent of the students per department participated in the program, with the highest proportion being 15 percent. Participation by businesses and agencies basically matched student participation; thus, each cooperating firm generally had one intern.

Departments provided favorable ratings for several characteristics of their intern programs. Overall, they gave their program a 3.7 rating on a 1=poor to 5=excellent scale. The lowest rating of 3.0 was provided relative to the "contribution to the academic program." Average ratings of 4.0 and 4.1 were offered for statements relating to "stimulation of students to develop socially and professionally" and "an introduction to the work environment," respectively.

The 15 responding departments graduated a total of 690 undergraduate students in the 1988-1989 academic year with a range per department from 5 to 220 students. Student retention as reflected by the graduation ratio was good, averaging 80 percent with a range from 50 to 95 percent. Across all departments, 14 percent of the graduates opted for advanced training.

The primary areas of employment for graduates were in agribusiness (25 percent) and other — primarily nonagricultural businesses (28 percent). Initially, the fact that slightly over a fourth of the graduates were employed in nonagricultural jobs was somewhat disconcerting. This could be viewed negatively and justified due to the graduates' lack of employability in agriculture, or we could opt for the more positive view that justifies such employment due to excellence in skills and training possessed by

the individuals and their adaptabilities. The latter option is the most palatable, and it seems to be appropriate because the highest average salary was reported for other (\$24,000), compared with \$22,000 for agribusiness. The market seems to be recognizing the training and skills possessed by these individuals, and it is rewarding them.

Education, farming, finance and credit, and government were next in importance with 19, 12, 8, and 8 percent of the total, respectively. Departmental respondents indicated that these percentages have remained fairly consistent during the last five years, except that agribusiness and nonagriculture have increased and education has declined. Also, employment in finance and credit was relatively higher a few years ago but has declined in recent years.

### CHALLENGES AND OPPORTUNITIES

Some of the most important issues confronting the discipline in the 1990s will relate to the nature of our undergraduate programs and curricula. Evidence abounds that curriculum design is a current issue and concerns are being voiced from both within and outside the university environment. For example, liberal arts faculty are concerned that many university curricula have become too "vocational" and devoid of humanities and language training; agribusiness leaders argue that our curricula are too production-agriculture oriented and do not provide sufficient attention to business management and communication skills; graduate faculty in the discipline insist that economic theory and math skills need emphasis; faculty in the technical agricultural discipline argue that our curricula do not include sufficient science and agricultural courses. Who is correct and what do we do to address these accusations?

While each of these contentions has individual merit, obviously one curriculum cannot completely address all of the demands placed upon it. A curriculum has a prescribed number of hours and thus inclusion or exclusion of each course is conditioned by priorities and compromises. However, a curriculum is more than a set of courses; it should be a set of learning experiences that addresses the needs of the student to become a well-rounded "total" person in addition to providing knowledge and skills that are useful in a career. Obviously, the components of a curriculum addressing career needs are influenced by the marketplace for such skills. A more service-oriented society with increased technology and global interdependence necessitates that students have well-developed communication and social skills and a world perspective in addition to specific job skills. In today's dynamic world, students also

need to be self-motivated and able to think logically and analytically on an individual basis. As Erven notes, curriculum development and reform should focus on the end result (graduates) rather than the means (courses).

Curriculum design must look beyond entry level jobs and provide students with attributes and skills that will viably persist throughout the student's career or at least facilitate augmentation in the future. As noted by Manderscheid, recent graduates can expect to change jobs seven times and careers three times during their lifetimes. Thus, students and their training must be adaptable and, obviously, adult and continuing education will receive increased attention in the future. These conditions seem to necessitate a broad-based undergraduate curriculum that provides flexibility yet promotes specialized training based on the student's career preferences.

Several articles and reports evaluate and identify needs and shortcomings in curricula in general and agricultural curricula in particular (Peterson; Keen; Gelinis; Tevis). Peterson, in discussing the four commission reports previously identified, noted that:

- too much specialization occurs too early in curricula, especially in today's dynamic environment where specific technological skills quickly become obsolete (all reports),
- too many student decisions are dominated by career-related factors while an increasing amount of time is being allocated to leisure activities (all reports), and
- increasing attention should be given to a core/general curriculum with arts and humanities provided more emphasis. (National Endowment and American College reports).

Two studies of agribusiness managers' preferences for training and skills of employees provide similar results. Deficiencies in agricultural programs reported by Tevis related to the need for more economics, business market analysis, sales and advertising, computer science, business management, and communication training. Litzenberg and Schneider reported that interpersonal characteristics (such as self-motivation, positive work attitude, and team player), communication skills, business and economic skills, and technical skills were the primary employee characteristics desired by agribusiness managers.

At the departmental level, an analysis of data concerning attitudes and beliefs of graduates of departments of agricultural economics at 1862 and 1890 institutions in the South indicated that they

were generally positive toward their departmental coursework but were somewhat less positive about their agricultural coursework (Adrian and Dunkelberger). For agricultural economics coursework, the graduates were most positive toward the emphasis given to basic academic subjects (such as math, science, and English), attention given to individual needs, and preparation for agribusiness jobs. Responses for agricultural courses indicated that many graduates found them to be of limited value in their jobs because of the narrow emphasis of material. In their evaluation of college curriculum competencies and skills, graduates emphasized preparation in communications, leadership, and decision making.

What can be gleaned from these articles and reports? Basically, it is clear that there are numerous demands placed on departments' curricula from diverse sources. Some of the desired skills have broad-based applications (communication and interpersonal skills), while others (business, economic, and technical) have more narrow focuses. Who should define the priorities and make curricular decisions—liberal arts faculty, agribusiness leaders, departmental faculty, or others? Obviously, it should be those who are accountable for the program—the departmental faculty. While it is desirable to have input from interested groups and develop a partnership in the process, departmental faculty must maintain a degree of autonomy in these decisions. We hope they will have a more broad, long-term view than would a group having a particular interest in a course or set of courses. As a check in this process, Keen notes that "...only those universities who are willing to respond to the needs of the market are likely to continue to be successful. Others, the nonresponsive ones, will continue to become weaker and will likely not survive the tight budget/fiercely competitive era of the future." Obviously, we cannot be as complacent as we may have been in the past.

Internships and other forms of experiential learning deserve increased attention by our departments. The Department of Education and Carnegie Foundation Commission reports recommend more active learning through discussion groups, internships, independent study, student involvement in research projects, and other activities that encourage creativity and risk taking (Peterson). Beyond providing work experience, internships and similar activities allow students to develop interpersonal skills, to apply what they have learned, and to understand better their appropriate career path along with elective courses that will be the most beneficial for them. I have seen the benefits of an intern program. Stu-



dents seem to have a different, more positive outlook; they participate more in class; they are more expressive and interested. However, the benefits to students and the program must be weighed against the costs to the department, which can be substantial.

Adult education will offer opportunities for some of our departments in the 1990s. Extension faculty have a successful history in addressing continuing education needs and these demands will increase. Also, adults will desire more; they will demand degree programs to address their needs. Can we or do we wish to provide the flexibility in curricula, course duration, and course timing to meet these needs? If we adjust to meet these needs, innovative administrative policies will be needed to facilitate the process.

Areas that may offer some departments potential for development in existing programs or adult programs in the 1990s are food retailing and distribution (in agribusiness) and resource economics, including recreation. These are natural outgrowths of our existing programs, and, in fact, six of the twelve departments providing information on programs listed a resource economics major/track/option. I do not believe these programs have reached their potential and, in fact, the food retailing alternative is just being developed at several institutions.

As we enter the twenty-first century, the first of the World War II baby boomers will be approaching retirement. They should be the wealthiest and most healthy retirement group yet. They will demand recreational activities and further stress our natural resource endowment. Also, the importance of resource management and environmental issues will increase. Jobs will be created to address these needs. The discipline's history in educating individuals in economics, management, and resources, and in helping them understand how government and other institutions function should place our programs in a unique position to train individuals for these jobs.

While it is clear that we should not allow unbridled program proliferation, diversification in a few re-

lated areas can benefit the discipline. We must recognize niches that are compatible with our expertise and develop them. Again, market forces will provide the signals, and we must be perceptive or the opportunity will be lost. This will result in great diversity among departments across the region.

## CONCLUDING REMARKS

Agricultural economics departments in the South have many positive characteristics but numerous challenges and opportunities will condition their success in the 1990s. Departments are graduating students, though fewer than several years ago; students are getting jobs at reasonably competitive salaries; graduates of approximately 10 years express satisfaction with training received in the discipline. Most departments seem to be viable and adaptive to the changing environment. They have or are adjusting curricula to address student and clientele needs better. They have programs to evaluate and reward faculty and to recruit and retain students, although there are notable differences in these programs among institutions.

Major challenges confronting agricultural economics faculty and departments include addressing the enrollment issue and developing and adjusting curricula to meet the needs of graduates as individuals, citizens, and professionals. This includes both "traditional" students and those desiring continuing and adult education. Increased emphasis also needs to be given to further development of intern programs for undergraduates and teaching reward and incentive programs for faculty, including programs for faculty renewal. We are entering the last decade of this century. I hope that we can look back in the year 2000 and say that we have successfully addressed these and other issues that will condition the viability of our discipline.

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