Characteristics of Agricultural Economics Undergraduate Advising in the Western Region

Josef M. Broder and Michael E. Wetzstein

The quality of faculty advising has been a source of concern among students and faculty. As an initial attempt at addressing these concerns this paper summarizes the results of a faculty advising study in undergraduate agricultural economics programs. Various advising program characteristics among western schools are discussed and contrasted to schools in other regions. Interregional and interdepartmental variation was found in advisor resource allocation, advising program implementation, rewards and priorities, and evaluations of advising quality. Despite larger enrollments, smaller advising budgets, less support and lower rewards for advising, schools in the West reported advising quality comparable if not superior to that in other regions.

The faculty advisor has been an important participant in agricultural economics programs. As an integral part of an undergraduate teaching program, faculty advising contributes to the students intellectual and emotional growth. For many undergraduates, the faculty advisor is the initial and/or primary source of labor market information. Faculty advisors also play a crucial role of identifying and recruiting superior undergraduates for graduate work and careers as professional agricultural economists.

Despite its importance to higher education, faculty advising has been cited as being among the poorest quality students services on university campuses [Polson and Jurich]. Ineffective and inadequate academic advising programs are common in higher education [Borgard, et al.; Bostaph and Moore]. Evidence of advising deficiencies in other departments raise concerns for advising quality in agricultural economics. Expanding undergraduate enrollment, increased diversity in jobs taken by agricultural economics graduates, the absence of training in graduate schools and low professional priorities given to advising are factors which have the potential for mitigating advising quality in agricultural economics. Although attention has been given to student groups with special needs [Harper and Blake], there have been no systematic and comprehensive studies of faculty advising in agricultural economics.

The objectives of this paper are: (1) to describe various characteristics of undergraduate agricultural economics advising programs in the western region, including how resources are allocated within these programs, and how these programs are maintained and rewarded, (2) to contrast academic advising programs in the western region to those in other regions, and (3) to identify deficiencies in advising programs and discuss strategies for maintaining advising quality. Studies which document advising structure and performance are necessary for designing and implementing future advising programs and for monitoring changes in advising quality over time. This paper focuses specifically on survey findings from agricultural economics departments located in the western region.

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Methodology

In October of 1979, a mail survey was sent to fifty-seven agricultural economics department chairmen at major universities in the United States, Canada and Puerto Rico. Forty seven responses were received with fifteen from the western region. Regional delineations were adapted from Peck and Babb. States included for study in the western region were: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington and Wyoming.

A review of the existing literature on undergraduate advising in other departments was useful for identifying relevant characteristics of undergraduate advising programs in agricultural economics. Advising program characteristics identified in previous research included: (1) general departmental characteristics [Beck, et al.; Mahoney, et al.], (2) advisor training and support [Bonar; Kramer and Gardner; and Johnson and Pickney], (3) advisor program coordination [Polson and Jurich; Borgard, et al.], (4) advisor monitoring and review process [Bostaph and Moore] and (5) faculty reward structure [Davis, et al.; Donk and Oetting].

The survey developed for this study was based upon characteristics identified in previous research. More specifically the survey asked department chairmen questions on departmental characteristics, including undergraduate enrollment, number and average age of advisors and departmental advising budgets. Department chairmen were also asked specific questions about their advising programs, including the level and nature of

¹In selecting the survey population, agricultural economics was broadly defined to include departments of food and resource economics, departments of agricultural economics and rural sociology, and departments of economics at Iowa State, North Carolina State, South Dakota State and the University of Puerto Rico.

advisee demands on advisors and selected undergraduate program characteristics. Next, the survey contained questions on how advisors were assigned, trained, coordinated, evaluated and rewarded. Finally, the survey asked department chairmen to rank advising within the context of other faculty activities and to rate selected characteristics of their advising program.

Departmental Characteristics

Advising characteristics from fifteen departments in the western region are shown in Table 1. During the study period, Texas A&M had the largest undergraduate program in agricultural economics with 747 students, while Hawaii had the smallest with 20 undergraduates. The average enrollment in undergraduate programs in the western region of 232 was considerably higher than the 184 average for other programs in the study. The number of agricultural economics majors increased steadily with class standings in the western region while other regions experienced a peak in majors among juniors and a decline among seniors. The marked increase in junior level majors was thought to partially result from junior college transfers. These data on enrollment by class standing give some indication of differences in the level and content of advising programs across schools in the western region.

The number of advisors per department and the amount of advising done by individual faculty differed across departments. Texas A&M with their large enrollment had 23 advisors, the largest number reported, followed closely by Montana with 19 advisors. However, the heaviest advising loads were experienced among faculty at New Mexico State, where each advisor was responsible for 48 students. When averaged by departments, faculty in the western region had smaller advising loads when compared to faculty in other regions.

Respondents were asked to report whether advising was specifically budgeted in their departments as a separate activity. Only four schools reported specific budgeting for advis-

²States in the Pacific region and the mountain, plains and Southwest region were combined to form the Western Region.

TABLE 1. A Regional Comparison of Advising Characteristics of Undergraduate Agricultural Economics Programs in the Western Region, 1979.

| | | Under | Undergraduate Enrollment | nent | | | Advivoo | EFTF Por | Association |
|----------------|-------|---------|--------------------------|-------|---------------|-------------------|----------------|------------------------------|----------------|
| State | Total | Seniors | Juniors | Soph. | Fresh- men | Total Advisors | per Advisor | 100 Advisees ^b | Age of Advisor |
| Arizona | 68 | 0 | 16 | 33 | 40 | 15 | 6.5 | O | 40 |
| Cal Davis | 459 | 226 | 156 | 45 | 32 | 12 | 38.3 | 0 | 47 |
| Hawaii | 50 | 10 | 9 | 2 | 2 | 10 | 2.0 | 0 | 20 |
| Idaho | 81 | 25 | 19 | 51 | 16 | 10 | 8.1 | 0 | 40 |
| Kansas | 249 | 88 | 29 | 53 | 49 | 12 | 20.8 | 22 | 48 |
| Montana | 305 | 70 | 74 | 97 | 64 | 19 | 16.1 | 0 | 49 |
| Nevada | 40 | ∞ | 10 | 10 | 12 | 80 | 5.0 | 0 | 37 |
| N. Mexico | 191 | æ | æ | æ | œ | 4 | 47.8 | 0 | 34 |
| N. Dakota | 384 | 94 | 104 | 100 | 98 | 12 | 32.0 | 0 | 40 |
| Oklahoma | 380 | 115 | 100 | 85 | 80 | o | 42.2 | .20 | 35 |
| S. Dakota | 200 | 09 | 54 | 49 | 37 | 6 | 22.2 | .27 | 45 |
| Texas | 747 | 220 | 215 | 185 | 127 | 23 | 32.5 | 0 | 37 |
| Utah | 82 | 50 | 18 | 12 | 35 | 2 | 42.5 | 0 | 4 |
| Washington | 139 | 40 | 28 | 36 | 35 | œ | 17.4 | .42 | 41 |
| Wyoming | 115 | 33 | 37 | 17 | 28 | 7 | 16.4 | 0 | 4 |
| Western Region | 232.3 | 72.8 | 64.0 | 52.5 | 45.9 | 10.7 | 23.3 | .07 | 42.1 |
| All other | 184.3 | 48.9 | 58.5 | 43.5 | 31.3 | 6.6 | 31.8 | .24 | 40.8 |
| | | | | | | | | | |

^aDate not available

^bThe number of EFTF's (Equivalent Full-Time Faculty) budgeted specifically for advising or counseling, adjusted on the basis of 100 students per year.

ing, with the chairman at Washington State reporting the largest advising budget as indicated by an EFTF of .42 per 100 advisees. An EFTF is a budgeting unit which refers to a equivalent full-time faculty or a faculty member working full-time for one year. The western region averaged only .07 EFTF per 100 advisees, considerably less than the .24 average for all other regions. The absence of specific budgeting for advising does not necessarily indicate that no funds are made available to advising programs, rather, that the role of advising is subsumed under other budgeted faculty activities, most likely, teaching. Differences in budgeting procedures may have an impact on faculty attitudes toward the advising process. When faculty have advising budgeted into their appointment contract, they might have more incentive to devote resources to advising. Among faculty without such specific appointments, advising activities may be given low priority as faculty are pressured to meet research and teaching goals. Further research is needed to confirm this hypothesis.

Advisors in the western region tended to have more years of professional experience, as indicated by the average age of advisors. Previous studies have discussed the relative strengths and weaknesses of faculty advisors in various age brackets [Mahoney, et al]. In general, older faculty tend to have more advising experience and, in some instances, more employment contacts, while young faculty often relate better to students. The oldest and youngest faculty advisors were located at Hawaii and New Mexico State, respectively. This study did not ascertain whether differences in the average age of advisors reflected a deliberate effort to best utilize the relative strengths of potential advisors.

Allocation of Advisor Resources

There was considerable variety in the manner in which advising resources were allocated. Advisees at Arizona typically held the longest sessions with their advisors while advisees at Hawaii visited their advisor most

frequently (Table 2). By contrast, advisors at Texas A&M held the shortest sessions, while advisors at Nevada received the fewest number of visits per month. Some of the above differences are attributable to differences in the school calendar, i.e., whether the school is on a term or quarter system. 3 The reader is cautioned about comparing differences among departments in the amount of time the typical advisee spends with his/her advisor. The actual contact hours between advisor and advisee is probably greater in smaller departments than the amount reported in Table 2. Smaller departments with smaller classes are more conducive to informal communication between faculty and students and consequently more advising may be done on a more informal basis.

The availability of advising services does not necessarily mean that students will utilize such services on a regular basis. Each department probably has its share of students who are familiar with program objectives and plan their programs accordingly, and students who avoid advisors in hopes of obtaining a more flexible schedule. For whatever reason, the degree of regular utilization of advising in the western region was comparable to that in other regions. Students wanted their advisors to have certain qualities and some were willing to change advisors for reasons of incompatibility. As long as a certain degree of policy uniformity is maintained across advisors, and individual advisor loads remain comparable, the changing of advisors may enhance the communication between advisor and advisee.

Other studies have criticized advisors and advising programs which merely provide clerical services to students during registration [Donk and Oetting]. This criticism does not seem applicable to agricultural economics advisors. This study found that advisors in agricultural economics performed a variety of functions. Among schools in the western re-

³Differences in the frequency of registration between schools on semester or quarter systems contributed to differences in advisor demands among schools.

TABLE 2. A Regional Comparison of Advisor Resource Allocation in Undergraduate Agricultural Economics Programs in the Western Region, 1979.

| | lypical | I ypical Advisee | | % of Advisees | Se | % OI # | % of Advisor's Time Spent on Subjects | pent on Subje | ects | Opported | a Level |
|-------------------|----------------------|------------------|---------------------|---------------|---------------------|----------|---------------------------------------|---------------|-------|-----------|-----------|
| | Minutes per Month | Visits | Seeing Advisor | | Found Employment | | | 00000 | | | Ag. |
| State | Advisor | Advisor | on Regular Basis | Advisors | Advisor | Academic | Career | or Social | Other | Electives | Electives |
| Arizona | 45.0 | .75 | 52 | 10 | 15 | 80 | 15 | 0 | 2 | 25 | 15 |
| Cal Davis | 15.0 | 1.00 | 75 | 15 | æ | 06 | 20 | 0 | 0 | α | Ø |
| Hawaii | 10.0 | 1.50 | 20 | 10 | 18 | 82 | 15 | 0 | 0 | 7 | 14 |
| daho | 15.0 | .50 | 75 | 4 | 10 | 75 | 10 | 15 | 0 | 22 | 9 |
| (ansas | 7.5 | .75 | 100 | 4 | 10 | 80 | 10 | 5 | 2 | 30 | 23 |
| Montana | 13.3 | 1.0 | 70 | 10 | ત્ત | 90 | 30 | 30 | 9 | 30 | 30 |
| Nevada | 7.5 | .25 | 09 | 2 | 40 | 06 | 10 | 0 | 0 | 10 | 15 |
| N. Mexico | 11.3 | .50 | 100 | 2 | 20 | 85 | 10 | 5 | 0 | 20 | 9 |
| N. Dakota | 20.0 | 1.33 | 09 | 8 | 10 | 35 | 15 | 15 | 32 | 20 | 0 |
| Oklahoma | 6.3 | .50 | 30 | 15 | 10 | 65 | 10 | 25 | 0 | 12 | 50 |
| S. Dakota | 15.0 | .50 | 80 | 20 | 30 | 09 | 90 | 50 | 0 | æ | 19 |
| Fexas | 6.3 | .75 | 10 | N | 25 | 80 | 10 | 10 | 0 | 25 | 10 |
| Utah | æ | 1.00 | 80 | 5 | 20 | 40 | 40 | 10 | 10 | 40 | 90 |
| Washington | 11.3 | .50 | 72 | 20 | 29 | 85 | 10 | Ø | က | 10 | 9 |
| Wyoming | 15.0 | .75 | 20 | 5 | 20 | 70 | 20 | 10 | 0 | м | æ |
| Western Region | 14.1 | 77: | 56.1 | 8.8 | 29.6 | 70.0 | 17.0 | 8.6 | 4.5 | 23.8 | 15.5 |
| All other | 15.1 | .63 | 56.9 | 8.2 | 25.1 | 69.7 | 18.2 | 8.3 | 2.4 | 28.4 | 28.3 |

^aData not available

gion, 29.6 percent of the advisees reported in the survey found employment from contacts made through their advisor, slightly higher than the amount in other regions. Washington State reported the largest percentage of students finding employment through their advisor. While not specifically measured in the survey, active centralized placement services are generally used by students as an alternative to finding employment through their advisor. Hence, data on the percentage of advisees finding employment through their advisor should not be intrepreted as a measure of a department's job placement success.

In a strict sense, faculty advisors in agricultural economics cannot be classified as mere academic advisors. Survey results for the western region indicate only 70 percent of the typical advisor's time was allocated to academic matters, 17 percent to employment-career matters and 9.8 percent to personal-social matters (Table 2).

On academic matters, the course options available to students in their junior and senior years facilitate the design of individualized programs. Considerable variation was found in the number of general and agricultural economics electives available to upper level students. When compared to other regions, the western region offered programs with fewer general and agricultural economic electives and consequently lessened the amount of advisor resources necessary for designing individualized programs of study.

Program Implementation

Five general criteria for assigning advisors were identified in the study (Table 3). Department chairmen were asked to indicate the criterion or criteria used at their school. Since many departments reported several criteria the percentage values in the individual sections of Table 3 do not total to 100 percent. Most of the schools in the western region assigned faculty advisors primarily on the basis of achieving equality across faculty and faculty interest or speciality. Student choice was used in 67 percent of the departments in the western region while specific

TABLE 3. A Regional Comparison of Assignment, Training and Coordination of Advisors in Undergraduate Agricultural Economics Departments in the Western Region, 1979.

| | Percentage ^a of D | epartments |
|----------------------------------|------------------------------|------------|
| | Western Region | All Other |
| Criteria for Assigning Advisors: | | |
| Achieve equality across faculty | 73.3 | 59.4 |
| Faculty interest or specialty | 73.3 | 53.1 |
| Student choice | 66.7 | 46.9 |
| Faculty or staff budgeted | 20.0 | 25.0 |
| Faculty or staff popularity | 0.0 | 9.4 |
| Training and Support Available: | | |
| Advising handbooks | 80.0 | 71.9 |
| Special training | 26.7 | 31.3 |
| Advisor workshops | 20.0 | 40.6 |
| Understudy | 13.3 | 15.6 |
| None | 26.7 | 21.9 |
| Advisor Coordinator(s): | | |
| Faculty or staff member | 53.3 | 56.3 |
| Department chairman | 26.7 | 34.4 |
| Departmental committee | 20.0 | 9.4 |
| No coordinator | 6.7 | 12.5 |

^aColumn values for individual sections sum to greater than 100% due to multiple reporting by departments.

budgeting was used in 20 percent of these departments. Faculty or staff popularity among students was not reported by any of the western schools in contrast to such reports from 9.4 percent of the schools in other regions.

The absence of advisor training in many agricultural economics graduate programs creates departmental responsibilities for training and supporting advisors. Advising handbooks were used by 80 percent and 72 percent of the departments in the western region and other regions, respectively. Relative to the western region, a larger percentage of departments in other regions used special training, advisor workshops and understudy. No training or support was reported in 27 percent of the departments in the western region, leaving to speculation the question of how faculty learn of their assigned duties as advisors in these departments.

Once established, advising programs must periodically incorporate university, college and departmental level curriculum changes. A variety of methods are used to coordinate these dynamic elements of faculty advising. In the western region, the task of coordinating the advising program is performed by a faculty or staff member in 53 percent of the departments while the department chairman and a departmental committee perform this task in 27 percent and 20 percent of the departments respectively. No formal method of coordinating the advising program was reported in 7 percent of the western schools. Since some schools utilized more than one method of coordinating their advisors, column values for the 4 methods of advisor coordination in Table 3 totaled to more than 100 percent.

Rewards and Priorities

Although the process of identifying outstanding advising is largely subjective, departments have made efforts to measure and reward oustanding advising. In the western region, informal student feedback was used as the primary source of information, fol-

lowed by administrative review and review by advisors (Table 4). Formal student evaluations were used by only 7 percent of the western schools, while 13 percent indicated that they had made no attempts to measure advising quality.

Sharp differences were found in the rewards for outstanding advising. Relative to the western region, twice the pecentage of departments in other regions reported offering salary increases for outstanding advising. Almost half of the western schools reported that they offered no specific rewards for outstanding advising. The absence of such rewards raises the question of whether faculty will invest resources to maintain advising quality. When contrasted to other faculty activities, advising was ranked fourth in importance for promotion and salary advances (Table 4). In all regions surveyed, research received top priority, followed by teaching, service, advising and administrativecommittee. A comparison of mean rankings of faculty activities indicates that western schools place considerably more emphasis on research and less on teaching, service, advising and administrative-committee activities than do schools in other regions.

Program Evaluation

The final objectives of this study was to ascertain how advising quality was evaluated by departments and to identify potential deficiencies in advising programs. Several data sources for advising quality were considered including assessments made by advisees, advisors and administrators. Difficulties in surveying students in individual departments precluded program evaluation by students. Evaluations by advisors were not solicited due to problems associated with identifying individual advisors. College or university level administrators were thought to be too far removed from advising at the department level. Because of their dual role as faculty and administrators, department chairmen were asked to evaluate selected dimensions of their advising program on a scale of 0 to 100, where 0 = poor and 100 = excellent.

TABLE 4. A Regional Comparison of Measurement, Rewards and Priorities of Advising in Undergraduate Agricultural Economics Departments in the Western Region, 1979.

| | Percentage ^a of D | epartments |
|---|------------------------------|-----------------|
| | Western Region | All Other |
| Measurement of Outstanding Advising: | | |
| Informal student feedback | 86.7 | 84.4 |
| Administrative review | 40.0 | 21.9 |
| Review by advisors | 20.0 | 6.3 |
| Formal student evaluations | 6.7 | 12.5 |
| None | 13.3 | 13.3 |
| Rewards for Outstanding Advising: | | |
| Salary increases | 33.3 | 68.8 |
| Rank promotions | 33.3 | 46.9 |
| Special recognition | 26.7 | 21.9 |
| None | 46.7 | 21.9 |
| Priorition Assigned to | Mean Ra | nk ^b |
| Priorities Assigned to Faculty Activities: | Western Region | All Other |
| Research | 1.09 | 1.20 |
| Teaching | 2.07 | 1.69 |
| Service | 3.47 | 2.66 |
| Advising | 4.07 | 3.34 |
| Adminstrative - Committee | 4.13 | 3.63 |

^aColumn values for individual sections do not total to 100% due to multiple reporting by departments.

These program dimensions were not meant to be all inclusive. Rather, they were thought to capture a variety of program characteristics.

The results of advising program evaluations indicated that department chairmen generally gave the most weight to accessibility of faculty advisors to students (Table 5). Western schools were generally consistent with other regions in their evaluations of other program characteristics. Faculty attitude, advising experience, faculty participation, advising uniformity, faculty interest followed in order of their ratings by department chairmen in the western region.

Student career follow-up received the lowest rating across all regions, suggesting that advisors tended to lose contact with their advisees upon graduation. These low ratings for student career follow-ups also indicate that faculty may be failing to obtain valuable feedback information from previous graduates. Finally, department chairmen in the western region evaluated the overall qualilty of their advising programs higher than did chairmen from other regions, despite the implication that the western region places less emphasis on advising than do other regions (as shown by the mean rank of faculty activities in Table 3). Although many structural and performance characteristics of advising programs presented in this paper are thought to influence advising quality, an analysis of relationships between program characteristics and quality remains a topic for further research.

Summary and Conclusions

The quality of academic advising in agricultural economics has been a source of concern among students and faculty members. Evidence of poor advising performance in other university departments suggested a

^bDepartment chairmen were asked to rank the following activities from 1st through 5th, in order of their importance for academic promotion or interim salary increases.

TABLE 5. A Regional Comparison of Department Chairman Evaluations of Advising Programs in Undergraduate Agricultural Economics Departments in the Western Region, 1979.

| | | Evalu | ation ^a | |
|---|---------|--------|--------------------|-------|
| | Westerr | Region | All C | Other |
| Characteristic of Advising Program | Mean | Rank | Mean | Rank |
| Attitude of faculty toward advising | 85.0 | 2nd | 84.3 | 2nd |
| 2. Proportion of faculty actively involved in advising | 76.7 | 4th | 71.6 | 5th |
| 3. Faculty interest in undergraduate student activities | 60.0 | 6th | 68.3 | 6th |
| 4. Accessibility of faculty to students | 88.7 | 1st | 87.0 | 1st |
| Uniformity among advisors in counseling knowledge and interpretation | 72.9 | 5th | 82.3 | 3rd |
| 6. Follow-up of student careers by advisors | 54.7 | 7th | 58.9 | 7th |
| 7. Experience of advisors in general | 81.3 | 3rd | 81.3 | 4th |
| Your overall assessment of advising quality in your department | 87.6 | | 84.4 | |

^aEvaluations based on a scale of 0 to 100, where 0 = poor and 100 = excellent

need to learn more about advising in agricultural economics. In response to this need, a survey of department chairman perceptions of faculty advising in undergraduate agricultural economics programs at major universities was undertaken. Various advising program characteristics described include: general departmental features, advisor resource allocation, advising program implementation, rewards and priorities.

Selected advising performance characteristics were identified and used as the basis for department chairmen evaluation of advising programs. A regional comparison of advising programs in western schools with schools in other regions indicated differences in the advising structure and reward system. Most notably, schools in the western region had larger enrollments, smaller advising budgets and offered less support to advisors in the form of training and rewards than did schools in other regions. Despite these characteristics, department chairmen in the western region generally felt that their advising quality was comparable, if not superior, to the quality found in other regions.

The primary purpose of this study was to document the existing state of faculty advising in undergraduate agricultural economics programs. Several issues remain for further study, the foremost of which concerns the impact of increased enrollment on existing advising programs. An acceptable advising program for 100 majors where advising is viewed as a supplementary faculty activity may prove to be inadequate as enrollments increase. As advising becomes a competitive activity for faculty resources, administrators may have to budget and reward advising activities to a larger extent than is currently practiced in order to maintain advising quality

Currently, graduate programs in agricultural economics are heavily oriented toward research with some opportunities for teaching and virtually no opportunities for undergraduate advising. Faculty may want to consider offering advising experience in their graduate program. Under the current decentralized system of undergraduate advising by faculty, many young faculty may become involved in counseling early in their careers. Graduate advising experience might reduce the amount of on-the-job-training of advisors, reduce the time necessary for a young faculty to establish an effective advising routine and perhaps, increase the amount of time the faculty can devote to activities which are given higher priority for professional advancement.

Departments of agricultural economics bear some responsibility for providing an education which is salable in the job market. Likewise, departmental admissions policies should take into consideration the status of the prevailing job market for agricultural economists. These policy adjustments in curriculum and enrollments require feedback from former graduates. However, this study found career follow-up to be the weakest component of advising in agricultural economics. Faculty and administrators should make greater efforts to solicit career related information from former graduates and incorporate such information in their advising programs. Such information might be readily obtained from periodic alumni surveys.

Departments should address the problem of how to allocate advising resources efficiently. Decisions to allocate future funding to advising may necessitate a critical evaluation of the current decentralized system of advising by faculty. The feasibility of using alternative advising methods could also be studied including greater use of group advising, graduate student advising, and specialized advisors of non-faculty rank. Departments maintaining existing programs may want to address questions of optimum and/or equitable advisee loads. Finally, each department should design an advising program which fits their individual needs and resource limitations.

References

Beck, Robert L., A. Frank Bordeauz, Jr., Joe T. Davis, Russell H. Brannon, and Loys L. Mather. "Undergraduate Programs in Agricultural Economics: Some Observations." American Journal of Agricultural Economics. 59 (1977): 766-8.

- Bonar, John R. "Developing and Implementing a Systems-Design Training Program for Academic Advisors." *Journal of College Student Personnel*. 17 (1976): 190-8.
- Borgard, John H., Phyllis A. Hornbuckle, and John Mahoney. "Faculty Perceptions of Academic Advising." National Association of Student Personnel Administrators Journal. 14 (1977): 4-10.
- Bostaph, Charles and Marti Moore. "Training Academic Advisers: A Developmental Strategy." *Journal of College Student Personnel*. 21 (1980).
- Davis, Joe T., Russell H. Brannon, Loys L. Mather, Robert L. Beck and A. Frank Bordeaux, Jr. "Selected Issues and Features of Undergraduate instruction in Agricultural Economics." Southern Journal of Agricultural Economics, 8 (1976): 39-45.
- Donk, Lenord J., and Eugene R. Oetting. "Student Faculty Relations and the Faculty Advising System." Journal of College Student Personnel. 9 (1968): 400-4.
- Johnson, Craig W., and James W. Pickney. "Outreach: Counseling Service Impacts on Faculty Advising of Students." Journal of College Student Personnel. 21 (1980): 80-4.
- Harper, Wilmer M. and Martin J. Blake. "A Performance Evaluation of an Alternative Approach for Training International Students." Western Journal of Agricultural Economics. 5 (1980): 57-62.
- Kramer, Howard C. and Robert E. Gardner. Advising by Faculty. (Washington, D.C.: National Education Association, 1977).
- Mahoney, John, John H. Brogard and Phyllis A. Horn-buckle. Journal of College Student Personnel 19 (1978): 28-32.
- Peck, Anne E. and Emerson M. Babb. "The AAEA Membership: Employment and Mobility Patterns." American Journal of Agricultural Economics. 58 (1976): 600-5.
- Polson, Cheryl Jean and Anthony P. Jurich. "The Departmental Academic Advising Center: An Alternative to Faculty Advising." Journal of College Student Personnel. 20 (1979): 249-53.