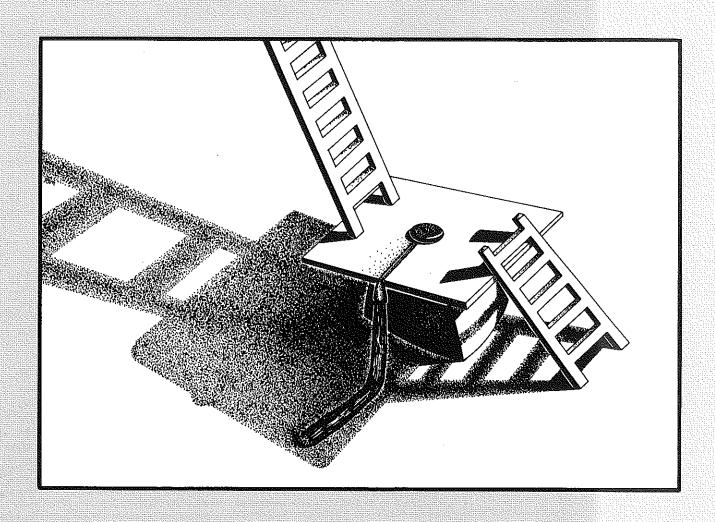
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THEME: Career Ladders

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ARTICLE SUBMISSION

Articles and photographs should be submitted to the Editor, Regional Editors, or Special Editors. Items to be considered for publication should be submitted at least 90 days prior to the date of issue intended for the article or photograph. All submissions will be acknowledged by the Editor. No items are returned unless accompanied by a written request. Articles should be typed, double-spaced, and include information about the author(s). Two copies of articles should be submitted. A recent photograph should accompany an article unless one is on file with the Editor.

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Career Progression for Teachers of Agriculture

Professors of agricultural education hold several positions during their careers. Most begin their career by teaching high school vocational agriculture for at least two years. While pursuing a doctorate, two or three years are typically spent as a graduate assistant. When a university position is landed, the title of assistant professor is granted. Some 5-6 years later, the omnibus tenure decision must be made. If it is affirmative, promotion to associate professor is in order. After another 5-6 years, promotion to full professor is the last increment in academe's series of hurdles.

Once this stature is obtained, an individual has two distinct options: (1) remain a professor or (2) move to another position, usually as an administrator. If the individual remains a professor, sabbaticals, research leaves, study tours, and other approaches are available to keep a professor productive for another 20-25 years. Needless to say, a professor's career pattern differs drastically from that of a high school teacher.

Career Options for Teachers

Once an individual becomes a secondary teacher, what career progression options are available? Few exist. A person can change vocational agriculture teacher positions, pursue a graduate degree to secure a higher salary, or perhaps seek a position in a different discipline. Nothing now available compares to the career ladder found in higher education.

Meanwhile, most 1980s reform literature suggests that secondary teachers need a system that offers monetary rewards while increasing the stature of teaching. In making such reforms, policy makers are faced with a perplexing question: What explains why teachers are satisfied yet effective? Educational researchers say we don't know for sure. But clues are provided by psychological theories and several research studies.

Theoretical models and a limited, yet growing, empirical base serve as foundations to design career ladders, merit pay, and other career enhancement approaches. But to make such approaches work, Maeroff says teachers must become empowered and take more responsibility for their destiny. Maeroff (1988) wrote:

"If teachers can be lifted in three key areas - each of which complements the others - they will be able to flex muscles that have been allowed to atrophy. Those three areas involve their status, their knowledge, and their access to decision making" (p. 472). Further, "Teachers who are being asked to change must be persuaded that there are rewards to be reaped" (p. 477).



By Blannie E. Bowen, Editor

(Dr. Bowen is an Associate Professor in the Department of Agricultural Education at The Ohio State University.)

Merit Pay Plans

Many reward plans being proposed (and implemented in several states) are labeled merit pay. The concept of merit pay is controversial, but not NEW. According to Johnson (1984, p. 22), "By various estimates, between 18% and 48% of the country's school districts paid teachers by performance between 1918 and 1928." Johnson presented several pros and cons of merit pay. On the positive side, she said merit pay (1) is consistent with the concept of free enterprise, (2) discourages ineffective teachers from remaining in teaching, (3) encourages teachers to critique their work and promotes healthy competition, and (4) stimulates taxpayer support based upon teacher performance (p. 24-25).

Negatives Johnson cited include (1) good teaching is difficult to define and measure, (2) evaluation systems are unreliable and potentially inequitable, (3) merit plans interfere with supervision, (4) the plans are not cost effective, (5) competition reduces morale and collegiality, and (6) few teachers are rewarded yet teaching quality is not increased (p. 25-28).

Career Motivation Plans

From a status and enrichment perspective, more than financial rewards are needed to increase satisfaction and effectiveness. As such, career ladders are often mentioned as companions to merit pay plans. This two-pronged approach is consistent with the Herzberg et al. (1957) theory of motivation and job satisfaction. Herzberg said that job satisfaction and dissatisfaction are not opposites on the same scale.

In the context of teaching, satisfaction is produced by one set of internal factors, i.e. a teacher's sense of achievement, advancement, recognition, responsibility, and the work itself (teaching). Another set of factors induce dissatisfaction, i.e. teachers become dissatisfied because of external factors such as interpersonal relations, policies and administration, salary, supervision, and working conditions, For example, a teacher's salary makes that person dissatisfied if the salary

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Career Progression for Teachers of Agriculture

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is perceived as too low. Raising the salary to what a teacher perceives is equitable will not produce a satisfied teacher. Satisfier factors must be nurtured to generate satisfaction.

A Proposed Career Ladder

Are there avenues the profession should explore to make teaching agricultural education more satisfying for secondary teachers? On the college level, the system of academic rank and tenure allow instructors to advance, achieve, and be recognized. Would such a system work for secondary teachers? Perhaps. A modified system might be successful — if it is based on theoretically sound constructs and draws upon research and agricultural education philosophy.

Secondary teachers could easily have titles of Assistant Instructor, Associate Instructor, and Master Instructor based upon carefully defined criteria. Who should decide the titles? Within each state, a Professional Development Panel could be formed. This Panel could be comprised of secondary teachers, state supervisors, and teacher educators. District level panels could do initial reviews and pass promotion recommendations to the State Panel which would make the final decision. Appropriate appeals mechanisms would need to be instituted.

To achieve a promotion, teachers could prepare and submit a dossier to document their performance. To be effective, promotions could not be automatic. Three areas would need to be included in the dossier: Teaching, Professional Service, and Professional Development and Enrichment. Ratings of exemplary, satisfactory, and unsatisfactory could be assigned to each category. For illustrative purposes, sample criteria are shown in Figure 1 to describe assistant, associate, and master instructors.

Assistant Instructor:

Bachelor's degree, 0-4 years of teaching experience.

Associate Instructor:

Master's degree, 5-9 years of teaching experience, Exemplary rating in 1 of the above categories, and Satisfactory in 2.

Master Instructor:

Master's degree and 25-30 hours of graduate credit (educational specialist's certificate), 10+ years of experience, Exemplary rating in 2 areas, and Satisfactory in 1.

Figure 1: Criteria for promotion as a secondary teacher.

How could you measure teaching, professional service, and professional development and enrichment? Several indicators are in the literature. Sample criteria are shown in Figure 2.

The Rewards

Agricultural education is constantly changing. Proposed

Teaching

Evaluations by the teacher, administrators, other vocational educators, peers, and students that focus on Rosenshine and Furst's (1975) research on clarity, business-like behavior, use of various instructional strategies, humor, enthusiasm, and other teacher effectiveness research.

Placement and performance of students.

Professional Service

Contributions to the school, district, state, nation, and internationally by virtue of being an agricultural educator. Nonvocational professional activities.

Committee service on various levels.

Professional Development and Enrichment

Development of instructional units, modules, visual materials, computer software, etc.

Enrollment in graduate courses.

Participation in study tours, leaves, and noncredit activities.

Writings for professional publications.

Program enrichment resulting from the teacher's initiatives, i.e. materials, supplies, equipment, etc.

Professional stature.

Figure 2: Indicators of teaching, professional service, and professional development and enrichment.

changes involving science, business, technology, international agriculture, and teaching agriculture to a pluralistic society will require teachers with skills and preparation vastly different from that of today's teacher. These professionals will be highly educated. We must institute vehicles to keep them motivated.

Merit pay and other compensatory plans are attacking a major source of dissatisfaction. According to an NEA report (Ordovensky, 1988), today's average teacher salary is \$26,551 (\$50,512 for high school principals). Realistically, many problems associated with dissatisfaction are beyond the scope of the profession. The proposed career ladder, however, capitalizes on intrinsic factors, the ingredients Herzberg et al. say bring about a motivated person. Its objectives are clearly within our profession's reason for existing, i.e. to safeguard academic integrity and enhance the stature of its members.

Alvin Larke, this issue's theme editor, secured outstanding professionals to address this complex issue. The profession will be enlightened by reading their thoughts.

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Career Ladders and Merit Pay

Because of trends occurring in occupations and various employment situations, many agricultural leaders are taking a close look at "Career Ladders." The term has conflicting definitions. However, it involves a beginning and often a change in careers. Where we begin and where we go tend to be contingent upon several factors, including finances, location, personnel, happiness, and most of all, qualifications.

Because of a report from the National Commission on Excellence in Education several years ago, many states mandated the development of career ladders often associated with merit pay programs. The objective was to reward good teachers for a job well done, i.e. an incentive they thought would motivate teachers to do a better job.

Contrary to what the reforms intended to provide, articles included in this theme issue discuss choices that we as educators make in pursuit of a chosen career. Some "rungs" of the ladder may be quite timely, but other "rungs" exist that demand less time.

Regardless of our interest, we start some place in our career and move either horizontally or vertically. We are affected by the career ladder. Whether we are students, producers, county agents, university professors, vocational agriculture teachers, or agribusiness persons, we have goals we hope are attainable. Our success depends on our percep-



By ALVIN LARKE, JR., THEME EDITOR

(Dr. Larke is an Assistant Professor in the Department of Agricultural Education at Texas A&M University, College Station, Texas 77843-2116.)

tions of other occupations and the degrees or backgrounds that assist or elevate us.

Because of the diversity of agricultural occupations and careers, authors were solicited from business, industry, extension, and secondary and higher education.

About The Cover

Secondary teachers of agriculture must be provided options for them to advance, be recognized, acquire more responsibility, and become more involved in the educational process. (Drawing courtesy of Pamela McHorse of the Texas A&M Instructional Materials Center.)

<u> THEIBMIB</u>

Building a Career Ladder

Earl Nightingale, Robert Schuller, Zig Ziglar, and probably every other motivational speaker who ever lived would assure us that we can be whatever we want. Roger Dawson, one of the world's foremost professional negotiators, says flatly, "You can have anything you want." Most psychologists would admonish us to take control of our own lives. Dr. Brian Tracy's philosophy is that, "If it's to be, it is up to me."

These platitudes may roll off the silver tongue of these super successful people, but the average recent college graduate may find such beliefs difficult to accept, especially in light of today's tight job market. As young graduates review opportunities for advancement in many careers in agriculture, they are likely to find very flat organizational structures. With the trend toward reducing administrative costs and realigning top-heavy organizations, this situation may not improve greatly in the near future.



By Lynne W. Thibodeaux

(Dr. Thibodeaux is an Extension 4-H Specialist at Texas A&M University, Texas Agricultural Extension Service, College Station, Texas 77843.)

A young female in agriculture may find difficulty entering her chosen field and even more difficulty identifying an "accessible" career ladder. What is the answer? Give up? Choose another career? Wait until things get better?

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Building A Career Ladder

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My answer to this dilemma is, "Build your own ladder." Real career opportunities are available to those people who envision a "perfect" job and then recognize and develop every opportunity. No one hired Dr. Robert Schuller to be minister of an existing church; he developed his church using a vacated drive-in theater. No one hired Jacques Cousteau to study marine life. He saw a need and developed it into a lifetime career.

How can people build a career ladder? Some very specific steps exist to help us locate or fabricate that perfect job, but as one might suspect, no instant pathway is available. The following suggestions provide a somewhat slow, but direct route to becoming successful.

Step 1

During the first five years of work:

- Identify personal strengths and weaknesses. Make a plan to build on strengths and to strengthen weaker areas.
- Make an ongoing plan to stay updated in subject matter, technology, and methodology.
- Try new career options or challenges now (overseas experience, short term contract, etc.) before getting "locked in" to family and career responsibilities.
- Start work now on people skills. Most people are hired for technical skills and promoted for their people skills.
- List the parts of current and past jobs which are fun and personally rewarding as well as those activities which are "chores."
- Be prepared to take some risks while exploring. This widens horizons as it more narrowly defines interests and abilities.
- Stretch, grow, and force yourself to learn new and difficult concepts.
- Locate an experienced professional in your field to serve as a mentor.
- Join and become active in your profession/organization.
- Build a resume' by adding new skills.

Step 2

During the second five years of work:

- Develop an area of excellence.
- Accept responsibilities or volunteer for experiences in that area of excellence.
- Promote yourself; this is not a classroom; no automatic

- promotion is given at the end of the year.
- Develop research skills and prepare to add to the body of knowledge in your area of excellence.
- Accept and learn from criticism.
- Post written, long-term career goals based on what you enjoy and do well, not on the next "traditional" career rung.
- Mentally picture yourself having reached your goal several times daily.
- Annually select and complete one major project which makes a significant impact.
- Join and participate in related professional organizations.

Step 3

Lifetime work patterns:

- Cultivate a network of professional friends in related areas.
- Refuse to accept substandard work from yourself or others.
- Go to the best primary source for information on every topic.
- Join and participate in related professional organizations.
- Regularly measure progress against your written goals.

Srully Blotnick, internationally famous business psychologist and consultant, says the way to become rich, truly rich, is to keep doing what you do well and like doing. Opportunities for advancement will come your way or you will see a way to develop those opportunities.

If you do not think a world class millionaire investment counselor has the answer for your career, maybe you can relate to Dolly Parton. When asked about her phenomenal rise to stardom from a background of poverty and minimal education, she said, "I never stopped trying and I never tried stopping." Not a bad formula for success for a lady with limited education and no career ladder in sight.

"Career Killers"

Finally, note that the following are considered career killers and must be avoided.

- Spending time with negative people.
- Feeling guilty.
- · Worrying about failing.
- Covering up for a failure.
- Working inefficiently.
- Trying to be something or someone you are not.

Remaining 1988 Themes

June: Public Relations

July: Entrepreneurial Education

August: Legal Issues and Agricultural Educators September: Articulating Instructional Programs October: Instructional Materials November: FFA's 60th Anniversary

December: Contemporary Philosophical Issues

Career Ladders and Educational Reform

Attracting and maintaining quality teachers has emerged as one of the main concerns of the recent wave of reform movements. This concern was prompted by suggestions that the academic quality of those entering teaching had declined. Many state legislatures proposed to solve the problem of attracting and maintaining quality teachers by implementing "career ladders." While this recognition of the importance of the classroom teacher is a healthy sign, poorly planned and implemented career ladder plans have the potential for as much harm as good.

Career Ladder Advantages

Teaching has long been seen as a "flat" profession with few career options other than leaving the classroom altogether. The role, responsibility, and job description of a 20-year veteran are essentially the same as that of a beginner. Career advancement for a teacher usually means moving into a non-teaching role. The intent of career ladder proposals is to solve this problem by providing career options for the highly skilled teacher.

Well designed career ladders do present an opportunity to make some basic changes in teaching that can address some long-standing concerns, including empowering teachers so that they have greater control over their own profession and the functioning of the school. Career ladders can be a means of helping the teaching profession achieve a level of professionalism that has long been desired.

Another concern that can be addressed through career ladders is that of accommodating the changing needs of teachers throughout their career. As teachers grow and develop, they have different needs and desires. The more experienced teachers have a desire to share their knowledge and ideas with others. One of their great resentments is to sit in an inservice workshop and be told to teach by someone who is less experienced and knowledgeable. A growing number of teachers are acquiring advanced degrees; yet, they are seldom given opportunities to share their knowledge with other teachers. This seems to be an incredible waste of talent by not allowing the proven "experts" the opportunity to assist others.

Career Ladder Problems

Unfortunately, the career ladder plans implemented through most of the reform movements fall far short of these ideals and, in some cases, may actually make it more difficult to attract and retain high quality teachers. Several major reasons lead one to this conclusion. Not only do many plans confuse merit pay and career ladders, but the criteria and the instrumentation for advancement to higher levels of the career ladder are also poorly conceived and inadequate. Second, the methods of implementation often create competition between teachers with a resulting climate that actually lowers morale and satisfaction with teaching. Finally, career ladders are seen by some as an inexpensive way



By Tom V. Savage

(Dr. Savage is a Professor of Educational Curriculum and Instruction at Texas A&M University, College Station, Texas 77843-4232.)

of providing raises to teachers. Rather than addressing the need for an adequate base salary for all teachers and then sufficient incentives above that to retain quality individuals, small increases are provided for a few. Rather than engendering excitement and commitment to the career ladder among the teaching force, this creates bitterness and resentment.

Merit Pay Plans

Clarifying the difference between merit pay plans and career ladders is important if career ladders are to be designed with potential for improving education. A merit pay plan rewards an individual for meritorious service. Generally, these plans have little to do with any change in the responsibility and status of the recipient. An additional stipend is given while the recipient continues on with little or no change in power or status.

Merit pay plans work best in situations where there are clear indicators of increased productivity. For example, an increase in the number of units turned out by a production worker or an increase in sales by a salesperson are clear indicators of improved performance. In education, there is no clear indicator of increased productivity. Thus, pay plans in education require extensive in-class monitoring of all teachers. This means that successful merit programs in education require considerable expenditure of resources for the monitoring process.

Another issue that must be resolved to make merit pay plans work is that those who make decisions about who will receive merit must be viewed as credible. The process must be viewed as accurately identifying the top performers. If the monitoring process is flawed because of insufficient monitoring, the use of invalid instruments, or the inappropriate application of criteria by decision-makers, the process does not become an incentive to good performance, but actually a disincentive. Individuals will not view skill as the criterion for merit, but rather, personality variables or the ability to put on a "show" during those few times the evaluator might be in the classroom.

Merit pay schemes are not new in education. As early as 1918, 48 percent of the school districts in the United States had a merit pay system. However, by 1972, this number

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Career Ladders and Educational Reform

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had dropped to about 5 percent (Murname and Cohen, 1986). The fact that this decline came about before the emergence of teacher unions as a power force casts doubts on the argument that merit pay systems failed because of union opposition. A more likely reason for the demise of merit pay in education is that the conditions required to make plans efficient and cost effective are simply not present in the educational movement.

To make a merit pay plan work, one must be able to answer, with precision, the questions of why one individual receives merit pay and another does not and what an individual must do to achieve merit pay. Indeed, some teachers are better than others. However, identifying the differences with clarity and precision is extremely difficult. Teaching involves such a complex set of behaviors that it is unlikely any clear and simple suggestion can be given that will enable a teacher to achieve merit pay.

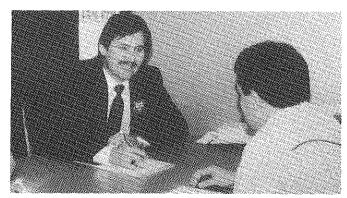
A Sample

To illustrate differences, compare a sample career ladder to the merit pay plans described above. The essential characteristic of a career ladder is that it includes a career path for the professional teacher. As one moves up the career ladder, there is an increase in status and power for the teacher. In addition, the responsibilities of each step increase so that there is also a professional challenge and stimulation for the teacher who chooses to move to higher levels. Monitoring is also required in the career ladder. However, the type of monitoring and the individuals performing the monitoring change significantly.

The Beginning Teacher. The role of the teacher at this level is that of instructing in the classroom. These teachers have few, if any, additional responsibilities beyond the classroom. Intensive in-class monitoring of these individuals is required to make sure that they demonstrate instructional competence so they can continue as a classroom teacher.

The Professional Teacher. All teachers are required to reach this level in a rather limited time frame. Whether teachers move beyond this level is left to individual choice. Once individuals reach this level, responsibilities, role, and power are increased. Some monitoring of instructional quality is still required. However, this might be done every two or three years. The intensive observation required of beginning teachers would not be needed. Other indicators such as relationships with peers and parents as well as contributions to materials and curriculum could be added. In addition, because these teachers have been in the classroom several years, patterns of student achievement over several years could be used as one of several indicators of instructional quality.

The Instructional Leader. The power, status, and pay of the teachers at this level should be equivalent to that of the building administrator. The role of teachers at this level is expanded to include the supervision of the beginning teachers, curriculum development, and the selection and development of instructional materials. The teachers who reach the instructional leader role in a given school are those



Clay Miller, banking official, says, "Leadership training provided through Ag. Ed. has prepared me for serving my community." (Photo courtesy of Richard I. Carter, Iowa State University, Ames.)

who make the decisions about the instructional program, including the hiring of new teachers. Teachers at this level could conduct the inservice training and participate in action research projects. Several different roles might exist for teachers at this level. The responsibilities of an instructional leader could be based on personal interest and expertise as well as school district needs.

To accommodate this expanded role, the instructional leader may teach a minimum of 50% of the time in the classroom. Some critics would object that this would be taking the teacher out of the classroom for some portion of the day. However, allowing these individuals the power to supervise and develop quality material would result in a multiplication of talents far beyond that expected if the individual is left in the classroom full time. It is imperative that these individuals be perceived as instructional leaders and as highly skilled and knowledgeable about teaching and learning. The monitoring and evaluation of instructional leaders would involve an array of data. The evaluation could be based on management by objectives. Intensive annual evaluations would not be necessary. Teachers at this level might be placed on a three-year cycle so that intensive monitoring would occur only every third year. In fact, individuals at this level could be charged with the responsibility of developing a packet or set of materials that could be used to demonstrate their performance over a given period.

Career ladders of this type have much potential for changing and improving education. This concept involves a total reconception of the organization of the school. It empowers teachers and gives them great influence over what happens in the school. The image of the teacher is enhanced and rewarded. This type of career ladder helps destroy the negative image that one is "just a teacher."

The direction of career ladders in education is still unclear. If the trend continues in the direction of merit pay, the impact on education will be minimal at best. Quality teachers want more than a few more dollars. They want to be recognized and empowered. They want some control over their profession. The current discussion about career ladders offers an opportunity to make changes that can have a major impact on education. Let's not waste the opportunity.

Murname, R.J., and Cohen, D.K. (1986). Merit pay and the evaluation problem: Why most merit pay plans fail and a few survive. "Teachers and Schools: Ideas for Action." Cambridge, Mass.: Harvard Educational Review.

A Look At Career Ladders From A State Perspective

A Nation at Risk was the opening volley in an educational reform movement that continues to have an impact on the profession. This 1983 report of the National Commission on Excellence in Education and those reports that followed it identified problems in education and looked for solutions. Teachers and the quality of teaching were at the top of the list. Teachers were described as inadequately trained for their job responsibilities. They worked in less than adequate environments and had few opportunities for career advancement in a profession that was low in salary and status. Each of these factors was perceived as affecting the quality of persons entering the profession and thereby affecting the level of student achievement.

State governments responded to the resulting public demand for an immediate change in our nation's schools. They legislated an array of educational reforms designed to improve the quality of education for the nation's youth.

Career Ladder Programs

One reform package proposed to improve the quality of teachers and teaching was the career ladder program. Research had identified a need to provide teachers with a career path. The lack of opportunity for professional advancement was seen as one reason for the paucity of academically able young persons choosing a teaching career. A career ladder program would enhance the attractiveness of the profession. By targeting the able teacher it would attract, recognize, and retain the effective teacher by providing opportunities for growth and advancement. Professional growth would occur within the teaching profession. A career oriented teacher could advance without having to move to an administrative position for job satisfaction, recognition, and salary.

Public support of the career ladder concept exists. According to a 1986 Gallup poll, a significant percentage of the nonteaching public would welcome a career ladder-like incentive plan in the schools. Communities seem to accept a "business" approach to teacher advancement and compensation. They see career ladders as one way to restructure a profession that has remained basically unchanged for many years.

Traditionally, all teachers are compensated equally. Their salaries are based on accumulated years of service and/or continued academic study. This lock-step pattern of compensation has continued even when research did not support the underlying theory. Many replicated studies failed to discern a link between teacher longevity and student achievement nor was a correlation found between academic degrees and classroom effectiveness.

Program Characteristics

Career ladder programs implemented or planned in



By Barbara Taylor

(Dr. Taylor is a Supervisor of Urban and Teacher Education for the State Department of Elementary and Secondary Education, Jefferson City, Missouri 65102.)

several states are more diverse than similar. They do, however, have certain common features. Most career ladders allow a teacher to progress from entry level to master teacher in a series of three to four stages. Each stage of the ladder requires certain years of teaching experience and greater degrees of instructional competence.

Programs also may increase or redefine the teacher's responsibilities. At present, two types of career ladder programs tie a salary incentive to increased responsibility — job expansion and job redesign. In a career ladder program with a job expansion strategy, a teacher assumes additional responsibilities while maintaining her or his assignment in the classroom. A job redesign program changes the major assignment of the career ladder teacher from teaching to other roles as mentorships, supervision, curriculum leader, and the like.

Teachers on a career path are those whose teaching effectiveness is recognized and documented. Thus, successful career ladder programs have a fair evaluative system, one that also is perceived as fair. The trend is to use multiple sources to record, analyze, and observe instructional behavior. Teaching effectiveness can be determined from peer, parent, and student evaluations, self reports, and student achievement.

Other Characteristics

Certain other characteristics are found in state career ladder programs. Programs may be designed and implemented statewide as in Texas or district wide as in Utah. They may be locally developed programs that meet certain state guidelines as in Missouri. Career ladder programs also may be locally developed, implemented, and funded.

Studies have shown that successful programs have teacher input. The team that develops and monitors the career ladder should include those most involved. The sense of "ownership" results in a program that is accepted by all who benefit from it — school, community, students, and especially, the teachers.

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A Look At Career Ladders From A State Perspective

(Continued from page 9)

Participation in career ladders is voluntary for all teachers in some programs and mandatory for beginning teachers in others. In Missouri, teachers many choose to enter the program after five years of teaching experience. In Charlotte-Mecklenburg, North Carolina, all teachers entering the system must be on career ladders. Career ladder participation is voluntary for veteran teachers and required for all new teachers in Tennessee.

One of the reasons cited by those who quit teaching early in their professional careers is teacher isolation. Teacher isolation also is related to teacher effectiveness — the greater the isolation, the lower the teaching skills. Career ladder programs identify the able teacher who advises, assists, and models teaching behaviors. Research says this is how teachers will improve. Such collaborative settings help the novice or uncertain teacher with support and guidance and the able teacher with recognition, a sense of professionalism, and self awareness.

Teacher Concerns

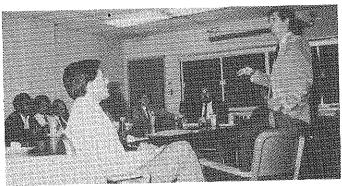
Continued funding of the program is one teacher concern. This incentive program can be funded exclusively by the state or the local district, or by a partnership basis with the state. Participants, however, want assurance that the money will be available. They fear that political resolve will weaken with changes in administration or when the initial enthusiasm wanes as the program matures.

Teacher evaluation systems are coming under scrutiny. Evaluation practices are being redesigned. Questions arise about what multiple sources of evidence of teacher effectiveness should be used. Should the evaluation be for growth or judgment? Should the same instrument be used? Teachers are concerned about evaluator objectivity. Teacher evaluation should benefit from this increased attention to the evaluation process. It can provide a way for teachers to assess their strengths and weaknesses, and chart a plan for improvement.

Program evaluation. Little documented evidence exists on the success of career ladder programs. Are able teachers being retained? Is student achievement increased? Are students being attracted to teacher education programs? Many of the research questions cannot be answered yet. However, perceptions are that career ladder programs will improve instruction and teacher quality if the programs are focused on teaching and learning. The program will serve to make teaching more attractive by providing an avenue for a teacher to assume more responsibility in a varied work setting. It will promote collegiality and, therefore, eliminate one perceived cause of teacher dissatisfaction — lack of recognition.

Conclusion

In the next 10 years, we will lose close to half of the present teaching staffs to retirement and other reasons. Enrollment in teacher education programs is declining. Contributing to this decline are the small populations of 18-year-old students entering college and the even smaller population.



Graduate students listen as a guest lecturer discusses investments and financial matters. (Photo courtesy of Rodney J. Martine, graduate student at Texas A&M University.)

of them choosing teaching as a career. The nation is moving from a period of teacher surplus to teacher shortage. These shortages already can be seen in certain areas.

How can we attract the academically able to teaching? How can we retain the able teacher in the classroom? As yet, little evidence exists to support the theory that rewarding teachers for quality work will attract students to teaching. Nor does research yet support the theory that rewarding teachers will improve teaching quality or retain the competent teacher. Are incentive programs such as career ladders a viable response to the problems affecting the profession?

Career ladders are a new way for teachers to think about their profession. The program offers a differentiation in status and rewards to teachers. Teachers are assuming more responsible roles, serving as mentors to new teachers, or as curriculum leaders. Career ladder teachers present workshops and develop courses. They join and participate actively in their professional organizations. Teacher collegiality is increased. A sharing of teaching content and method exists. For many teachers, these increased responsibilities, growth opportunities, and recognition make a perceptual change in the status of the profession.

Career ladders can make a difference. Initial results from limited research say that career ladder teachers tend to be more satisfied and are more committed to their jobs than noncareer ladder teachers. A well-designed plan that is the result of teacher, administrator, board of education, and community patron input can work. Teacher quality and teaching effectiveness can improve when teachers can see the results of their behaviors in pupil progress and in the support of their peers and administrators. A career ladder program that is well-supported, well-implemented, and educationally sound can be a real success story.

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THEME

Agriculture As A Career Choice

A young person's future in today's technological society depends almost entirely on that person's education and job skills. Therefore, occupational preparation is a fundamental part of everyone's education. Preparation for a work role must become a basic component of every student's educational planning.

Today, when most jobs available were not even known 20 years ago, a study of the ever-growing range of jobs and career opportunities must be a basis for choosing a career area. Study in this area gives a basis for choosing a future role intelligently that allows individuals to use their talents, develop interests, make a contribution to society, and move up a career ladder through continuous learning.

Fortunately, many choices are available, and the more individuals know about the present and future work world, the better they can prepare for and choose an occupational area where they will be happy and successful.

Where the Action Is

Agriculture is a growing, dynamic, and exciting industry. A farm background is an asset to those seeking agricultural careers, but it isn't necessary. Many young people now in agriculture as well as others who are preparing for agricultural careers are from cities, suburbs, and rural, non-farm communities.

The opportunities in agriculture probably are broader than any other job area. No matter what one's interests are, the type of career being sought, or the lifestyle a person wants to adopt, the chances are excellent that a person can find a place in agriculture where young men and women receive adequate to excellent financial rewards and one of the world's great opportunities to serve the human race.

Diverse Opportunities

Agriculture needs bright, young minds on farms and ranches where increasingly complex and scientific operations demand well-educated, talented men and women. In addition, many opportunities exist in agricultural business, communications, education, food processing, industry, and science. A broad variety of businesses serving agriculture offer challenging careers to people with majors or minors in agriculture. Also, these businesses offer careers to those who take courses in economics, business administration, accounting, finance, computer programming, sales, and many other subjects.

Choosing Your Career

Too often a career is chosen because of its glamour, or vaguely defined reasons, without much concept of what the daily work will be like or what talents and interests are necessary or valuable.

While the financial rewards and social status of a career are not to be ignored, the most important questions include:



By Howard R.D. Gordon

(Dr. Gordon is Coordinator of Vocational Agriculture at Prospect Heights High School, Brooklyn, New York 11225.)

- (1) Will I enjoy the day-to-day work?
- (2) Is the work suited to my interests and talents?
- (3) Are my prospects for success in this career field favorable?
- (4) Are the financial rewards adequate for the lifestyle that I want to live?

How do individuals know whether they will enjoy a given career? No guarantees exist. However, such individuals will be far ahead if they first identify what:

- (1) They like to do,
- (2) What interests they have, and
- (3) What talents they possess.



A career in Urban Horticulture provides gainful employment opportunities for students in an urban setting in Brooklyn, New York.

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Agriculture As A Career Choice

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Table 1 Examples of careers available in various areas of agriculture.

Business & Finance	Communications	Government	Production Agriculture	Science
Agricultural Economist Chemical Salesperson Credit Manager Farm Appraiser Farm Realtor Florist Loan Specialist Marketing Specialist Purchasing Agent	Advertising Writer Public Relations Radio & TV Technical Writer Wildlife Writer	Commodity Inspector Cooperative Extension International Agri. Specialist Meat Inspector Park Ranger	Beekeeper Dairy Farmer Farmer Fruit Grower Nursery Operator Poultry Farmer Rancher Timber Manager	Agricultural Engineer Animal Breeder Avian Specialist Ecologist Entomologist Forester Horticulturist Parasitologist Plant Breeder Soil Chemist Soil Conservationist Teacher Wildlife Biologist

Required High School Courses

Four years of English and mathematics are recommended and may be required by most colleges. Biology, chemistry, physics, vocational agriculture, foreign languages, and social sciences are advised. A prospective student should consult the high school counselor to ensure that a particular curriculum meets the admissions requirement for the college and the course of study being considered.

Can city-reared people enter agriculture? Yes! More and more agricultural students come from urban areas. A farm or ranch background is an asset, but each year thousands of young people from cities, suburbs, and rural nonfarm communities embark on agricultural careers.

Can a person have an agricultural career without moving to the country? About 90% of the jobs for persons with degrees in agriculture are off farms. If desired, one can work in the biggest urban centers, or for a farm, orchard, or ranch.

The demand for people educated and trained in agriculture will continue to increase in the foreseeable future. Those who decide to pursue a career in agriculture will have the satisfaction of contributing to the solution of the major problems of our time - hunger, environmental quality, and world peace.

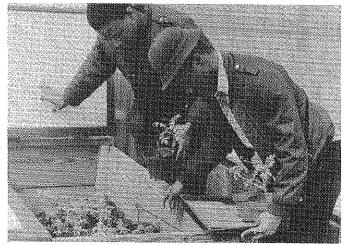
Finally, these individuals must examine those careers that mesh with their characteristics and interests.

Summary

An art as old as the "Garden of Eden" and a science as new as tomorrow, agriculture is a profession to some and a hobby to others. Agricultural training can be obtained in high schools, junior colleges, and state and city universities where a student can earn a certificate, an associate's degree in agriculture, and not only a bachelor of science, but also a master's or doctoral degree.

Early agricultural work experience will assist in making the decision whether this career is the one to pursue. Knowing how to study, take directions, be on time, assume responsibility, follow through, and do one's best work are all part of preparing for the future. Everyone cannot be a top student, but everyone has some ability which can be developed to offer a good future.

Every occupational area has work that ranges from the less complex to very theoretical. Therefore, if one is interested in medicine, electricity, construction, art, or agriculture, work exists to be done if one prepares. Many of these career areas do not require the best students, but each does require early planning and preparation.



Students of Prospect Heights High School in Brooklyn, New York, participating in a Nursery Management work experience. (Photos courtesy of the author.)

Career Ladders From Varying Occupations

Is there a future in the agribusiness industry? The answer is: "Do you, your children, and your grandchildren intend to continue eating?" Agriculture and its varying industries are basic to life. Therefore, its future is, indeed, a bright one.

Until the age of computers, agriculture in the United States was perhaps the most progressive and aggressive industry in the world. What other industry reached its potential so rapidly that we paid people not to produce? We are paying farmers not to plant crops because of grain surpluses, yet opportunity abounds.

This article is not meant to be a discussion of farm subsidies, but rather a picture of a continually growing industry that provides many opportunities for people. It provides an opportunity to be a part of the food chain in the United States and the world. The agribusiness industry includes feed, grain, livestock, fertilizer, chemicals, vegetables, seed, pharmaceuticals, and many others.

Job Opportunities

Basically, two normal job areas exist - hourly employees and salaried employees. The hourly employees come from all walks of life depending upon the location of the office or plant. Surprisingly, this also is true of the salaried employees. More and more of them come from a nonrural background. And while agricultural colleges are the backbone as an employee resource, each year we have more new employees that come from liberal arts colleges.

A major source of employees is the college campus. However, not all companies insist that employees have a college degree. Depending upon the job description, a degree is often preferred. Other sources of employees are employees of other companies, Extension agents, referrals, write-ins, and walk-ins. The qualifications needed will depend upon the technical needs of the position and other standards. Standards include a self-starter, motivated, a goal setter, people oriented, a leader, etc.

Another major factor with many positions is mobility, your willingness to move. Examine yourself carefully in this area. Do you really want to move? If not, make a dedicated effort to find employment in your chosen geographical area. In some recent studies within our company, we have found that up to 75% of our turnover was due to some type of relocation problem. This can be expensive and stressful to both the employee and the company. Give this area thoughtful consideration.

One other important source of employees is promotion from within. For instance, promotions can occur from hourly to salaried and on up. This is great for employee morale and also provides well qualified people for the company. This, in the truest sense of the word, becomes a "career ladder."



By Dale E. Blank

(Mr. Blank is Manager of Division Recruiting/Sales Training for Cargill, Minneapolis, Minnesota 55440.)

Opportunities in What Area

Most industries have three general areas of employment - administration, production, and sales. A possible fourth is the responsibility of two or more of these areas because you are part of a small organization or promoted in a large organization. We will cover this in more detail later.

Hopefully, opportunities for career advancement are equal in all three areas. Therefore, the need to recognize your talent and abilities so you can seek employment in the area which affords you the best chance of success is very important. We call this "fitting the round peg in the round hole."

Surprisingly, we find that more and more people are doing less and less in choosing a career. It's as if you graduate from college, open the door and say, "Her I am world!" What a great way to impress a prospective employer!

Most companies have people who would be happy to discuss their company and their industry. Teachers, professors, and other community leaders also can be a good resource. Agribusiness is large and a lot of information is available in libraries, colleges, and from present employees. Do your pre-work. It can save you a lot of time and money, and enhance your future career.

Centralized or Decentralized

Much is being said and written about whether your organization is centralized or decentralized. And you might ask, "What does that have to do with my career?" First, what is the difference between the two? In simple words, it is the level in an organization at which profit or loss decisions are made. The lower the level, the more decentralized the organization.

I will not discuss the pros and cons in this article. However, it is important when you look at the career ladder. In a centralized organization, you tend to be more of a specialist. For example, in sales several layers may exist: salesperson, sales manager, district sales manager, regional sales manager, national sales manager, and so on, through the corporate ladder. This is in contrast to an organization with a salesperson who reports to a general manager, then an area supervisor, and finally, the president of a decen-

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Career Ladders from Varying Occupations

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tralized company. In a centralized organization, you can follow your specialty (sales for example) to a higher level, have more distinct guidelines, a more focused area, and probably less flexibility. In a decentralized atmosphere, you would have a wider and larger range of responsibility, more flexibility, and the need to have entrepreneurial skills.

Very successful companies are in both areas. However, their modes of operation differ considerably. You should try to match your strength to the companies if you wish to climb that career ladder.

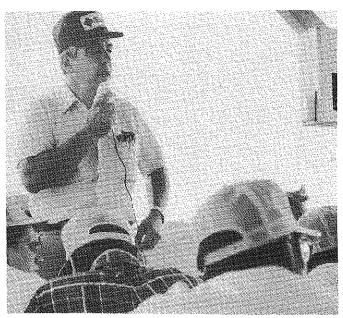
Ultimate Responsibility

It seems as if I have spent a lot of time discussing choosing and preparing for the organization you wish to join and rightfully so. Most people need to find the right company, job, and themselves to be truly successful. The few who can "walk on water in the summertime" will be successful with almost any company.

To be able to climb that career ladder and have more responsibility, what is needed? Yes, proper technical skills are important. However, many people who have excellent technical skills are on the lower one-half of the career ladder. Most important is your attitude. You must enjoy the challenge of wanting to be better and be willing to put in the extra hours and effort to successfully complete a project without griping about it. I recently heard a speaker say that only 10-15 percent of today's college students are motivated to this degree. Most are interested only in money and going home at 4:30. I don't know how accurate this is, but if it is even close, guess who will climb the highest on the career ladder?

Another important factor includes people skills, the ability to get along, work with, and eventually supervise people. Few jobs exist that do not involve interaction between people. You should do it well.

Can you see the "big picture?" Yes, you have to know your job, but do you see how it fits into the "big picture?" If you wish to advance up the career ladder, you must envision how decisions affect both the customer and the com-



Agribusinesses are increasing their educational efforts for their employees and for their clientele. (Photo courtesy of Julia Gamon, Iowa State University, Ames.)

pany. You will need to be a general manager, one who knows how a business is run. It means understanding profit and loss, cash flows, debits and credits, balance sheets, etc. and being able to see how sales, administration, and production must work together to be most efficient and productive. For those who wish, it can be a challenging and stimulating opportunity.

You may be saying, "What does this have to do with agribusiness? So far what you have said is rather generic." Excellent opportunities are in agribusiness. We are advancing at a rate that is more rapid than before. Biogenetics, feed additives, new by-products, new hybrids, chemicals, management techniques, etc. are examples. You could go on and on with the advancements. They contribute to the challenge of feeding the world. Opportunities for agribusiness careers began when the first seed was planted. They will continue until the last seed is planted. That certainly is sufficient time to enjoy a challenging career in agribusiness.

RESOURCE

Dairy Termination Payments Are Taxable To Farmers

Farmers who are accepted into the Dairy Termination Program (DTP) of the Commodity Credit Corporation will receive two different kinds of taxable income as a result, the Internal Revenue Service says.

Part of each payment compensates dairy farmers for the difference between the amount received when the dairy cattle are sold under the DTP and the higher price that could have been received if the cattle were sold for dairy purposes. This part of the payment may qualify for capital gain treatment.

The rest of each payment is a replacement for income from milk production and is includible as ordinary income on Schedule F, *Farm Income and Expenses*, of Form 1040.

The Dairy Termination Program is designed to reduce surplus milk production. Under this program, some dairy

farmers receive payments from the government in return for stopping all production of milk, disposing of their entire dairy herd, and agreeing not to use their dairy facilities for milk production for five years.

For more information, farmers can get free IRS Publication 225, Farmer's Tax Guide, by sending in the order blank from their tax return package or by calling IRS toll-free at 1-800-424-3676.

Multiple Career Ladders

Extension director, computer store owner, grain elevator manager, agricultural chemical salesperson - what could these people have in common? All may possess certification to teach agriculture. These former AGED'ers are among those who have found that more than one career ladder is available. They have shifted to other career ladders rather than climbing only one. The have advanced career-wise with increased salaries and expanded influence and authority, but they have done this on different ladders in varying occupations.

Those who choose as a career ladder a series of stable promotion positions within the teaching profession sometimes react scornfully to those who do not choose to teach or those who do not make a career of teaching. Commonly heard comments are: "They're just using teaching as a stepping stone. They're not serious about teaching." Such conclusions are unwarranted. Both those who leave and those who stay can benefit the profession. Those who stay provide stability, maturity, and continuity. Those who leave open positions for new instructors who often bring fresh ideas and enthusiasm to the job. Both roles are valuable.

Some questions arise. What kinds of careers can begin with agricultural education? Is agricultural education's sole purpose to prepare high school teachers? If not, are curricular changes needed at the college level? What career paths are students likely to follow? How can they best be prepared?

Non-Teaching Graduates

In the past, two or three years of teaching agriculture at the high school level was the preferred route to other nonteaching positions. Increasingly, graduates in agricultural education are going directly to non-teaching positions upon graduation. At Iowa State University, 31 teachers were newly qualified to teach agriculture in 1986-87. Of that number, 15 were employed immediately by agribusiness. The trend in Iowa is similar to the national trend. According to Craig (1988), during the past 16 years the number of new graduates certified to teach who chose jobs in agricultural business instead of teaching has increased rapidly. About 60 percent of last year's graduates did not teach. If the Iowa experience is typical, many of these students had not intended to teach. Of the students who wanted to teach, all found teaching jobs.

Why do undergraduates take a teaching preparatory course when they do not want to teach? Several reasons can be cited: 1) The agricultural education curriculum offers a broad-based education with the opportunity to choose technical agriculture courses from various disciplines; 2) The curriculum emphasizes "people skills" necessary for working with individuals and groups in all settings; 3) Students see teacher certification as an insurance policy in case their other career goals do not materialize; and 4) Some students choose agricultural education as an alternative to what they perceive as "technical" agriculture majors.





By Julia Gamon and Wade Miller

(Dr. Gamon is an Assistant Professor and Dr. Miller is an Associate Professor in the Department of Agricultural Education at Iowa State University, Ames, Iowa 50011.)

Multiple Career Paths

Why do people teach for only a few years and then change career ladders? Some never intended to stay in teaching. They use classroom teaching as a stepping stone to careers in administration, Extension, business, and full-time farming. They start teaching because it is a field that is open to new college graduates, whereas, many other careers require experience they do not have. For example, the Cooperative Extension Service is reluctant to hire persons who lack professional experience.

In Iowa, approximately a third of the county agriculturists have degrees in agricultural education. They usually have taught for several years. Their experience in working with the community, organizational aspects of the FFA, communication and presentation skills, and their broad knowledge of technical agriculture make agriculture teachers very attractive to the Cooperative Extension Service. Teachers who choose to move to a job in Extension often cite the following reasons. They are ready for more autonomy, less supervision, and a less restricted environment (away from periods and bells). They welcome the opportunity to work with adults, although many have said they miss the close contact with FFA youth. Two things they carry with them are the long hours and the myriad of responsibilities which are a part of Extension as well as the high school setting.

Another career ladder for agricultural education graduates is teaching at the postsecondary level. High school teachers who move to teaching in a community college or vocational/technical school do not always receive higher pay, but sometimes receive other benefits. They may work with students who are more mature and more motivated. The wide range of student ability which exists in high school in these days of mainstreaming may not be as much of a problem at the postsecondary level. Postsecondary technical

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Multiple Career Ladders

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agriculture instructors are likely to specialize in a particular technical area and have an opportunity to excel at their specialty. For example, Darwin Miller, a former high school vocational agriculture instructor who now teaches at Ellsworth Community College, has won national recognition for his work in swine production.

Another popular career path is agribusiness. A recent trend is the availability of business careers specifically related to education. Ubadigbo (1987) polled selected agribusinesses in Iowa (feed, chemical/fertilizer, seed) and found that they had increased their educational efforts since 1980. Companies have always hired agricultural education graduates in sales and management; increasingly they are hiring them to direct educational programs internally for employees and externally for clients.

Rather than working for others, some former agriculture teachers are operating their own businesses. An example would be Keith Carlson of Agri-Education, Inc., in Stratford, Iowa. Carlson was a highly successful teacher for a number of years. As a teacher, he realized a market existed for quality teaching materials. He decided to leave teaching to start a company; he now employs several people and produces many types of curriculum materials for use in agricultural education.

Curricular Changes Needed

What changes need to be made in the undergraduate curriculum to reflect the decreased percentages of undergraduates going into classroom teaching? What could be done to facilitate career changes for those who have taught for a period of time and have decided to make a change? Undergraduate course requirements should reflect varied career goals of the students.

Agribusiness leaders are seeking employees with agricultural backgrounds, communications and public relation skills, and computer literacy. Those students without practical agricultural experiences prior to college need handson experience in operating equipment, managing animals, and working with crops (Coorts, 1987). Existing experience programs may need to be revamped. For example, at Iowa State University, there is a required Early Field-Based Experience consisting of a 5-day school visitation designed for freshmen and sophomores. The purpose is to help students with a career choice and to provide them with experiences they can use as examples in future education courses. Students attend orientation and debriefing sessions and complete the Early Field-Based Experience in a vocational agriculture program. They have the option of also doing an experience in business or Extension. More students need to be encouraged to try all three areas.

Ten weeks of student teaching are required to graduate with a B.S. degree in Agricultural Education at Iowa State University. The student teaching experience makes agricultural education students attractive to banks, chemical companies, fertilizer companies, governmental agencies, and other employers. Why?



Dennis Johnson, Extension agent, says, "Broad based learning experience received through the Ag. Ed. curriculum has been valuable to me in my career." (Photo courtesy of Richard I. Carter, Iowa State University, Ames.)



Faculty Advisory Committee members meet to discuss promotion and tenure, evaluation and merit, and faculty senate reports. (Photo courtesy of Rodney J. Martine, graduate student at Texas A&M University.)

Student teaching provides a unique educational experience for undergraduates in planning, delivering, and evaluating their technical knowledge in a manner that facilitates learning by the students. Student teachers are asked to draw upon a great amount of technical knowledge and make decisions about what is important for their students. Classroom settings provide student teachers with everyday practice in making presentations before a group. Feedback is instant and sometimes painful to the ego. High school students do not tolerate incompetence.

Arguments exist for requiring student teaching, but arguments on the other side exist also. If only a minority plan to teach, why require student teaching for all? Surely experiences in other educational areas in agri-business or Cooperative Extension could be made just as rigorous and would be more in keeping with students' career goals. Perhaps more internships would be an answer. In-depth courses in agriculturally related communications and public relations could be required as an alternative to student teaching. A high school teacher's success is highly dependent upon how well the teacher likes to work with high school students. Successful preparation for being an agricultural educator in non-school settings should not be dependent upon one's rapport with teenagers.

The success of a high school agriculture teacher is dependent upon the support of the school's administration, parents and the overall community as well as the students. Com-

munity support not only is critical to a good teaching program but can also provide contacts for career moves for the successful teacher. Such career moves have been easy in good times, but more difficult during troubled times for agribusinesses. Perhaps instructors who wish to move to a different career ladder could benefit from inservice programs, workshops, and/or internships in businesses. The potential need for such programs should be explored.

Summary

One would be erroneous to assume that everyone is seeking a variety of career ladders. On the contrary, many people prefer a long-time teaching career. In a survey conducted by the Iowa Vocational Agricultural Teachers Association (IVATA) in the spring of 1986, the mean tenure was more than nine years, certainly a respectable figure. The special niche in the high school for the agriculture program and teacher is an important one. This article is not suggesting that teacher preparation be abandoned. Rather, the intent is to help agricultural education serve those who choose other careers, either immediately upon graduation or after teaching a few years. Needs of such students during their college years and at job searching times deserve consideration and support.

There is an increasing number of agricultural education graduates who choose not to teach, but choose the agricultural education undergraduate curriculum for a variety of reasons. They are in agricultural education because they like the wide choice of technical agriculture courses and the emphasis on people skills found in agricultural education. Also, some people teach for a few years and then change to careers in agribusiness, governmental agencies, and production. They should not be ignored. Individuals who are on other career ladders are an asset to agricultural education and their unique needs and desires should be addressed.

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THEME

"Chasing After the Wind" vs. Realizing Your Potential

Throughout all of education great fascination exists with the notion of developing career ladders. This ideal permeated most discussions associated with the various modes for reforming the education profession. Usually, most proponents are overly fixated on the higher education model whereby one enters the academy as an assistant professor and progresses through the ranks (and presumably up the ladder) to full professor.

Certainly this higher education model is not all that effective. A ladder with two steps beyond entry level can, in and of itself, only create limited self stretching, variety, or fulfillment. With the higher education model, one can reach the rank of full professor and still have 25-30 years of service remaining with very limited additional rungs that have any appeal. In this case, the professor faces the same situation as a high school teacher who faces 30 years as an instructor of vocational agriculture.

Career Ladders - Not The Answer

If vocational agriculture teachers think of a career ladder as consisting of steps "up" within the same setting, i.e., teaching vocational agriculture at the same school, then it is not going to happen. Too much mitigates against such a model. First is the fact that vocational agriculture departments are small; often only one or two teachers are



Ву L.H. Newcomb

(Dr. Newcomb is a Professor and Chair of the Department of Agricultural Education at The Ohio State University, Columbus, Ohio 43210-1099.)

available. Furthermore, many vocational agriculture programs are offered in small schools. Even in area vocational-technical centers, limited levels of "upward movement" would be available.

Toward A More Robust View of Career Progression

Educators need to examine what teachers really are after when the notion of something called career ladders is so appealing. What is really needed? Is it steps upward in a hierarchical fashion? Or is it an ever evolving and enlarging professional role? One would hope teachers are seeking the latter.

Perhaps teachers are searching for variety, stimulation, (Continued on page 18)

"Chasing After the Wind" vs. Realizing Your Potential

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challenge; for the ideal of becoming all one is capable of being. One always needs to strive for greater mastery and to develop an ever-increasing array of talents. In sum, teachers need to realize that they are goal-seeking creatures and that they constantly must set new, challenging goals without waiting on someone else to set them. When this occurs, meaningful growth and accomplishment can always be forthcoming. For some professionals, this satisfaction can be found throughout the duration of one's career in the same school, while some may find it by moving to other positions.

The point is that how each person finds this fulfillment varies. There are no panaceas. To focus on the notion of career ladders as a way to stimulate and reward teachers is far too restrictive an approach.

Some Possibilities

Local teachers of vocational agriculture need to conduct a self assessment periodically. All professionals need to determine where they are, how satisfying the profession is or can be, and where they want to be in terms of how they spend their time and how they contribute to the greater good. In addition, professionals need to inventory possibilities, the appeal these possibilities hold, and determine whether accomplishment will be worth the required investment.

Be A Master Teacher

Local teachers always should aspire to be master teachers - the kind of teachers who make a demonstrable difference in the lives they fully realized. Each stage of accomplishment actually is a step (a rung in a ladder, so to speak) which brings enormous satisfaction. The role can be enlarged further by preparing for and becoming a cooperating teacher - a teacher educator residence, as it were. Increasingly, the role to be filled at the local level as instructional leader - a role for which vocational agriculture teachers are well suited - also exists.

An Administrative Role

Teachers in a larger department could serve administratively as department chair. This really should not be viewed as a step "higher," for it is merely a differentiated instructional role. Those in area vocational centers could serve similarly as local vocational education supervisors. Again, as with each of the above possibilities, one accepts new duties which bring variety, stimulation, challenge, and a sense of accomplishment which bring ultimate satisfaction.

Within the local school, one also can devote stages of her or his life to roles other than classroom teacher. Great satisfaction could come from serving as a counselor, principal, or superintendent. These experiences can provide often needed variety and stimulation as well as reward.

State Leadership

Excellent professionals also are needed in educational roles other than at the local school level. Aggressive and visionary leadership is needed in state supervision. Again, limited steps



Teaching agricultural sciences is one of the first "rungs" on the agricultural career ladder. Mr. Terry Hausenfluck, of Stephen F. Austin Jr. High School, instructs his group using the new Agri. 101 curriculum. (Photo courtesy of Rodney J. Martine, graduate student at Texas A&M University.)

are valuable for most persons, i.e., assistant supervisor; head state supervisor, associate director of vocational education, and director of vocational education.

Become a Professor

With advanced preparation, an additional array of possibilities appears within higher education. One can be a teacher educator. Again, in the traditional role, a total of three steps exist. Of course, parallel roles such as department chair, assistant dean, associate dean, or dean are available. Likewise, one could work as an administrator within the Cooperative Extension Service or the experiment station system. Also, administrative roles are available within the central administration of a university.

Steps Don't Work Magic

But, it's not the steps that work the magic. It's the accomplishment within whatever the appointment is that will "do anything" for any professional. Countless thousands of educators are "down and out on themselves" not because of lack of levels in a career ladder, but because they are not vigorously pursuing the possibilities that are within their current situation. They do not have a sufficiently large dream or a clear and demanding enough vision of what they can and should accomplish.

Once at the Top - Then What?

Nevertheless, teachers merely are "chasing after the wind" if they merely seek to climb whatever steps exist within whatever role they find themselves. Within whatever possibility one finds himself or herself, the crucial task is to create variety, options, and internal challenge. Solely using linear thinking is not in one's best interest. One can go only so high. The options always narrow as one ascends. Once at what you "think" is the "top," the question is always - then what?

The basic challenge is to keep reaching, striving, driving, and accomplishing until one has become all she or he can be with the ability God has given. Some will do that in one school, in one role, for a lifetime. Others will move from role to role and perhaps "rise" within each role only to realize they have been "chasing after the wind," and still not find the sense of accomplishment and, more importantly, the contentment which was sought.

ARTICLE

Beyond the School Room: Stimulating Young Minds Through Landscape Design

"Play is not bound by reality - it is extraordinary. The untrammeled character of play is reflected in our language: we play with words, we entertain playful thoughts, our imagination plays, we go to plays - always leaving far behind the everyday real world" (Dattner, 1969).

Once upon a time, a group of school children found paradise: large areas of cool, green grass surrounded by flowering shrubs, trees, and bulbs. Hidden paths and sweeping bedlines with inviting niches beckoned frolic and adventure. Their eyes were dazed by structures that revolved, reflected, bounced, bumped, sprayed, sang, swooshed, and slid. As they saw, they experienced. As they experienced, they learned. This story may sound like a fairy tale, but fortunately playgrounds and schoolyards like this one are finally becoming reality.

As educators, it is our responsibility to educate our students in ways to incorporate indoor classrooms into our outdoor environments. Children are our finest natural resource. Let us educate and pass on a sense of values to our children so they might, in return, continue this process.

Children have always made the best of their play situations. Remember the traditional schoolyard: swings, slides, see-saws, and monkey bars surrounded by a dotting of shade trees such as oaks and maples? The traditional playground has been flattened, skinned of grass, and surrounded by the ever-present chain-linked fence. "Its rules and regulations are stamped on front - no this; no that. We know it's a playground because of its sterility and seal of authority" (Friedberg, 1976).

Because nothing exists to stimulate the child's active thinking process, most traditional schoolyards are considered obsolete and outdated. For a child to develop properly physically, emotionally, socially, and intellectually - she or he must be exposed to stimulating environments that arouse interest. The idea of transforming a stale, boring schoolyard into a stimulating learning environment for children has always been fascinating. John de la Howe School, an agricultural school located in South Carolina, was chosen as the experimental design for this playground transformation.

Methodology

The methodology for creating a masterplan for John de la Howe School was divided into the following phases: 1) Research, 2) Analysis, 3) Design, 4) Application, 5) Implementation, and 6) Conclusions.

Research

The school history, a literature review, and several case studies comprised the research portion of the project. Research of the school's history revealed that John de la Howe School is the oldest manual training school in the U.S.





By Preston Lewis and Mary Haque

(Mr. Preston is a former graduate student and Dr. Haque is an Associate Professor of the Department of Horticulture at Clemson University, Clemson, South Carolina 29634.)

This institution was established in 1797 by Dr. John de la Howe with the provision that it would "care for and educate 12 poor girls and 12 poor boys of Abbeville, South Carolina" (John de la Howe School). John de la Howe School, first known as the Lethe Agricultural Seminary, attempts to serve the needs of S.C. children who, for some reason, must be removed from their home environments. The school includes 1,476 acres of land, is listed in the National Register of Historic Places, and is a Registered Natural Landmark.

Case studies were completed at several local area schools where children were interviewed and asked what things they felt were important in the landscape. Age groups from 6 years to 16 years were interviewed. The literature review revealed information on a stimulating European concept called Adventure Playgrounds. Adventure Playgrounds, first designed in 1943, are areas where children are given raw materials and encouraged to create their own environment. Some other concepts found were the idea of community involvement in playground design and implementation to increase a sense of pride and reduce vandalism. The idea is to have children act as clients because in reality they are the clients.

Analysis

The analysis phase of this project included locating and completing base maps for the campus, completing a visual and climatic analysis, illustrating sun/shade patterns, wind directions, good and bad views, and pedestrian/vehicular circulations.

A surrounding land use analysis identified land owners whose properties bordered that of the school. The Corps of Engineers and the U.S. Forest Service own the majority of this land and neither have future plans for development.

(Continued on page 20)

Beyond the School Room: Stimulating Young Minds Through Landscape Design

(Continued from page 19)

Structures on campus were photographed and compiled into a photo analysis. This analysis served primarily as an aid in the design process.

A soil analysis found Hiwasee Sandy Loam 2-6% and 6-10% as the predominant soil types. These soil types should pose no problem in landscape implementation and plant survival.

An architectural analysis was completed, illustrating existing structures to be landscape designed. A text accompanied each drawing illustrating positive and negative aspects of each structure.

Existing vegetation was located and identified. Nandina domestica (Nandina), Abelia grandiflora (Abelia), Ligustrum japonicum (Ligustrum, and several Ilex species (Holly) constituted the majority of vegetation. Large oaks provided an established look while expansive grass areas provided an open, airy feeling. Vegetation was found to be disease and insect-free.

To get a better understanding for children's needs, interviews were held with each grade level. On a 24" x 36" poster board, each class wrote or drew the items they most wanted in their landscape (photo 1). Listed at least once in each grade was the desire for more trees, grass, and flowers (photo 2).

On a separate occasion, a sample of students from each grade were asked to draw, from memory, what things they saw when walking to school from their cottages. Again, drawings included grass, trees, and flowers.

Design

"The final expression of the frustration of the otherwise powerless children is the scrawling of obscene remarks on the unyielding and inhospitable asphalt. The children know that whoever created this place did not care about them, and they learn not to care about those who built it" (Dattner, 1969).

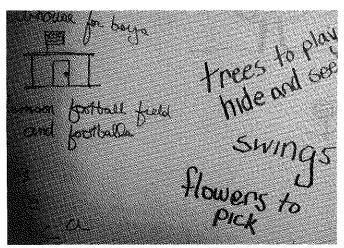
What a responsibility it is to design a playground. It must not only include elements to satisfy the child's material needs but also elements that provide sensory and motor stimulation. Sensory stimulation includes impressions received through the senses - seeing colors, forms, textures, hearing sounds, and touching or being touched. Motor stimulation includes activities and elements that support eye-hand and eye-foot coordination.

For the John de la Howe School masterplan, specific emphasis was placed on design from a child's perspective and included elements to stimulate active thinking. The land-scape design incorporates 10 structures, two entryways, five free space areas, and a playground. Two pragmatic goals were developed during this process: 1) Incorporate as much existing plant material as possible, and 2) since the school has no implementation funds, keep the budget to a minimum.

In an attempt to unify the entire campus masterplan, several plant materials were repeated: Myrica cerifera (wax myrtle), Lagerstroemia indica (crape myrtle), Liriope muscarii (liriope), Betula nigra (river birch), and Hemerocallis hybrida (daylily). River birch and wax myr-



Children representing different grade levels at the school were asked to write or draw what they wanted in their landscape.



The need for more flowers and trees was included on all children's needs list.

tle were used extensively because nice specimens can be found on school property.

Because the children at John de la Howe School spend the majority of their day at school and on the playground, specific emphasis was placed on the playground design. Children do not need a conglomeration of intricate play equipment for them to create their own fantasies from the endless resources available at their touch: heat, cold, sound, color, and textures.

Shaped somewhat like an octopus, the playground for the schoolyard (photo 3) incorporates 3 separate areas or "arms" for different age groups and 2 "arms" for group interactions. "Recent research has strongly suggested that an important factor in social growth is mixing children of different ages, not segregating younger children from older children as in the past" (Eriksen, 1985). The highest arm of the octopus is 6 feet above ground and is designed for teachers and older students. Since this would be the highest point, teachers could easily observe children in all areas of the playground. The area will also serve as a seating area with benches and picnic tables. A large, multi-colored canopy provides shade to those who may not desire sun.

For the older students, a free-space area where ball could be played was incorporated as well as a "raw materials" fort, located on a berm and surrounded by **Bambusa mulitplex** (bamboo) for a "jungle atmosphere."

Another "arm" was specially designed for young children.

A nearby windmill would be relocated to the site. As the wind turns the blades, children have a first-hand look at the effects of power. A maze, designed with four-foot plant materials, provides fun, but allows children to be seen from the teacher's roost.

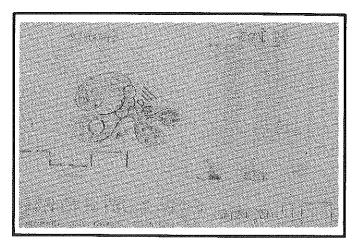
To strengthen eye-foot coordination, children could balance themselves on an old tree trunk. A grafitti wall of whitewashed concrete allows children to express themselves by giving a message to visitors that "children do live here." A musical fence, constructed of various materials from bamboo to plastic, provides a surface for sticks to be rubbed and a variety of musical tones to be created. The tree trunk would provide motor stimulation while the grafitti wall and musical fence enhance sensory stimulation. "To perceive is to put stimuli in order and to learn to recognize patterns, such as the recurrence of a familiar street or the repetition of sounds as rhythm and music" (Erikson, 1985).

Dattner observes that, "The most interesting place in a typical playground is the drinking fountain, the site of an endless stream of activity and water" (Dattner, 1969). Because children are fascinated with water, a small fountain and foot pool were incorporated into the playground. The pool would relax the eyes, ears, and brain while cooling tired feet.

Applications

What can you do as an agricultural instructor to educate your students in design for a stimulating schoolyard? Below is a listing of several ideas that you may wish to promote.

- 1. A plant maze.
- 2. An outdoor amphitheater. "Building with sand, playing make-believe on a treehouse stage and role playing all provide perceptual experiences" (Eriksen, 1985).
- 3. Season interest plant materials: plants with color, scent, texture, and form.
- Culverts completely buried in a mound or hill to provide a tunnel. Even children want to be alone at times.
- 5. Old vehicles brightly colored and permanently secured. Children love to pretend to drive.
- 6. An old boat, for pretend or real.
- An old tree trunk laid horizontally and used as a balance beam.
- 8. Wooden cable spools that children could move for climbing, riding and jumping.
- 9. A grafitti wall to allow children to express themselves.
- 10. Tree stumps placed in the ground at varying heights for sitting, jumping, balancing, or separation of areas.
- 11. Automobile and truck tires can be used in a variety of ways.
- 12. A musical fence.
- 13. Brightly painted trash receptacles.
- 14. A spot for a small flower and vegetable garden with plants labeled.
- 15. A map of the state, country, or world painted on asphalt or concrete.
- 16. Allow children to bring in items that they treasure to be embedded in concrete.
- 17. A compost pile so that children can see first-hand the effects of decomposition. Children also learn about saving food as they deposit uneaten portions of meals.
- 18. Ropes for climbing.
- Unbreakable mirrors.



Hidden paths and sweeping bedlines characterize the "childrens" playground design for John de la Howe School. (All photos courtesy of the author).

20. Flat surfaces for skating, ball, or other games.

The list is endless, but the best way to develop ideas for playgrounds is to "brainstorm" with children. The children are the clients. They know best.

Implementation

"Changes in schools come from peoples' energies, not from budgets or square-footage requirements. It is not money that effects change, but the motivation and energy of many people who care and are ready to change" (Taylor and Vlastos, 1975).

Because the school has no implementation funds, a program similar to Clemson University's "Tribute Through Trees" would be beneficial. "Tribute Through Trees" allows one to donate plant materials in honor or memory of someone. Alumni could also implement one or more phases of the masterplan each year.

Conclusions

With an increasing focus being placed on active learning and active stimulation for children, playgrounds are beginning to "look like children." The learning environment incorporates individuals working with individuals and a continuous interaction of students, teachers, curriculum, and environment.

The masterplan for John de la Howe School provides a unique dimension for the school and can also provide ideas for similar institutions in the United States. It is the authors' hope that agricultural educators will stress the importance of creating stimulating learning environments that extend beyond the school room and into the enriched and everchanging schoolyard.

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ARTICLE

Using Models To Improve Classroom Instruction

In a classroom setting, the easiest and most basic method of teaching is the straight and unillustrated lecture. A few would include the use of the chalkboard in this category. Other instructors rely upon the overhead and slide projector presentation technique. This article focuses on the use of models to enliven instruction. Five points will be presented:

- 1. Why use models.
- 2. Designing the model.
- 3. Designing the syllabus to use models.
- 4. Using the model.
- 5. Evaluating the class experience.

This article seeks to open the door to the use of another technique which has proven useful in the classroom. Models are, in effect, a little known and little used basic method of classroom teaching.

Why Use Models

Models are all around you. Hobbyists entertain themselves with scale model railroads. In television and motion pictures, models are an essential part of any production involving high intensity action or elaborate scenery. Architects and designers use models in all phases of the planning process. Live theater could not exist without the use of models for set design. The intent of this article is to give the vocational instructor the theory of a practical adaptation of model building that will prove very useful in teaching.

Why use models in the classroom? Models give three dimensionality to the idea being presented. Even an electrical model that involves only wiring takes on a more realistic appearance than a schematic diagram. It also can give a true indication of the space relationships involved. Models will give your students not only something to look at, but also in some cases something to feel and manipulate. In short, models provide someplace to start the teaching of the basic theory.

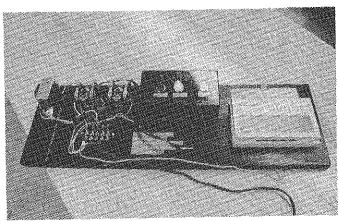
If models are to become useful to you, they must be a part of the solution and not a part of the problem. They must be easy to design and construct and must convey a useful message to your students. It has been found that the most successful method is to place completed parts of the model together in the same order that the full-sized prototype would follow. Thus, your lecture would not only follow the steps necessary to complete the procedure, but also would have the advantage of showing the procedure. Example: The assembling of the major components of a hydraulically powered feeder box onto a truck chassis.



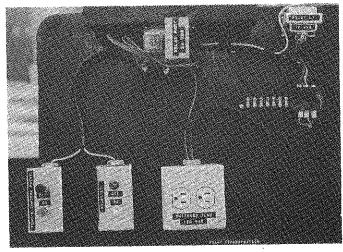
By LARRY KIRK

(Dr. Kirk is the Broadcast Editor and an Assistant Professor of Agricultural Education at the University of Nevada-Reno, Reno, Nevada 89557-0106.)

However, in order for such a technique to succeed, you need to adapt your syllabus to include the time and use of the models.



A model showing the operation of a digital furnace air conditioning thermostat.



Model showing the operation of a latching relay system (Photos courtesy of the author.)

Designing the Model

How does one design the model so that it will be easy to build, durable enough to withstand classroom usage, and most importantly, be helpful in the presentation of the subject? The first step is the selection of the scale to be used. Most models are based upon $\frac{1}{4}$ " = 1'. This scale is most convenient because it is easy to remember, small enough to fit the classroom, but large enough to show most of the details you wish to have the students see. (If it is a large classroom, a larger scale should be adopted so the students can see the points you wish to make.)

The materials used can be anything that work well for you, but should be materials that can be easily shaped and fitted. Balsa wood and styrofoam with plastic paints are especially effective. With the modern day assortment of glues and bonding agents, fastening is relatively simple. Remember that the appearance of the model is more important than its structural strength. Do not be afraid to use your imagination and creativity. In fact, this makes the actual construction more enjoyable. The final details of painting, etc., should be done with care since attention to detail will do wonders for the overall effect. Because vocational instructors are handy with tools and building techniques, few additional details are needed. A helpful suggestion is that after you build a model or series of models, try them out on a test audience before presenting them in the classroom.

Designing the Syllabus

As indicated before, the classroom syllabus should be designed to include the use of the model. Ideally, the best time to include the use of the model is the period when you are planning your semester classes. Second, if the model is to be useful, it must blend into the classroom situation easily and serve a useful purpose. Again, remember the example of the assembling of the major components of the hydraulically-powered cattle feeder box. Use of the model can show its major components, its principle of operation, the procedure for correct maintenance, etc. After you have assembled the model in the classroom and the students understand the principles, the class can be shown a full-sized

truck. The students will have learned the principles better and will retain them longer.

Using the Model

Using electrical, hydraulic, or mechanical models with moving or operating parts will also increase safety in the field. After you have worked with the model and the students are oriented to the major points you wish to make and understand the safety problems involved, you can work with the full-sized machinery with less risk. If using steam, electricity, or operating hydraulics, you can use lower pressures, voltages, or temperatures on the model than you would use on the full size machine. This also gives you a higher safety factor.

Evaluation

Now comes the hard part. You have gone to extra expense, time, and planning to incorporate a single model or series of models into your classroom. How do you evaluate it or them? My method of evaluation involves three main points:

- 1. Did the use of the model make a significant difference in how the students learned the point or points you were trying to teach?
- 2. Did the use of the model make a significant difference in the way the students responded to the point or points you were trying to make? (Was there better attention, a longer attention span, more questions, discussion, or statements to the effect that, "Now I understand what you are trying to show me"?)
- 3. Did you feel that the use of the model made a significant difference to the class and to yourself?

Finally, models are not a cure all. If you can adopt even one or two of the points made and they prove helpful, then the time was well spent.

Reference materials about models are available from many sources. A suggested reference is Scene Design and Stage Lighting, Third Edition, by W. Oren Parker and Harvey K. Smith. It is published by Holt, Rinehart and Winston Publishing.

RESOURCE

Farm Foreclosure Tax Guidelines Are Available

Farmers may have a federal income tax liability if a bank or other lender forecloses on their mortgage or repossesses their property, but relief from at least part of the tax liability may be available, according to the Internal Revenue Service.

The tax liability may arise because, under the tax law, a foreclosure or repossession generally is treated like any other sale or exchange. A taxable gain may result if the amount realized by the owner of property transferred through foreclosure or repossession exceeds the property's adjusted basis.

The adjusted basis of property

generally is its cost, increased by improvements and certain other items, and decreased by depreciation and similar items.

If personally liable for repayment of a debt secured by the farm property, a farmer may have taxable income from cancellation of the debt, in addition to any gain or loss from the transfer of the property. However, the cancelled debt need not be included in income if:

- The cancellation takes place in a bankruptcy case under Title 11 of the United States Code; or
- The farmer is insolvent when the debt is cancelled, and the amount ex-

cluded is not more than the amount by which the farmer is insolvent; or

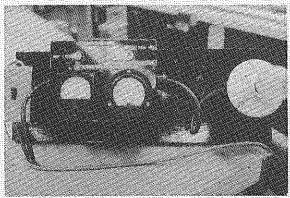
- The debt is discharged after April 9, 1986, by an unrelated lender and was incurred directly in connection with the operation of the farming business; or
- The debt is discharged before 1987 and was incurred or assumed in connection with property used in a business.

A farmer who wishes to exclude income from a cancelled debt must meet certain other conditions as well,

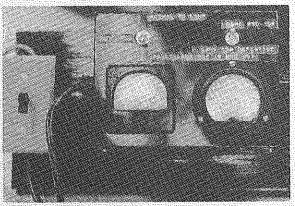
More detailed information is contained in the free IRS Publication 225, Farmer's Tax Guide, which can be obtained by calling or writing the IRS.

Stories in Pictures

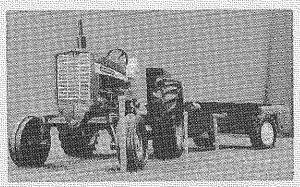
Using Models in the Classroom



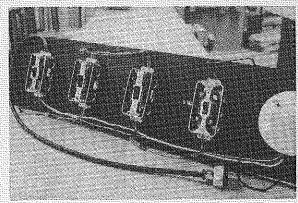
Model showing how an OSHA ground in an electrical system operates.



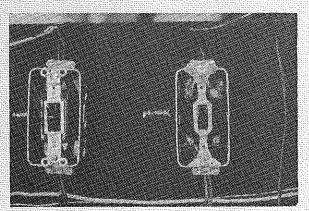
Details of the OSHA ground model.



Model tractor and a driving course.



Model of 2 way and 4 way switches in a lighting circuit.



Details of 2 way and 4 way switches in a lighting circuit.

(Photos courtesy of Larry Kirk, University of Nevada-Reno.)