
The D&D Curriculum
Teacher and Industry Perspectives
Teaching the D&D Curriculum


The AGRICULTURAL EDUCATION Magazine

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By Ed Osborne

The AGRICULTURAL EDUCATION Magazine

Curriculum reform in secondary agricultural education during the past five years had focused almost exclusively on agri-science. And much has been accomplished in a relatively short time; secondary agricultural education appears to be on the upswing. This turnaround is largely due to the new agricultural curriculum programs that many states have developed and implemented. We must continue to offer high quality science-based courses as a part of secondary agricultural education.

But we must not let the focus of the secondary agriculture curriculum swing too far, even in the direction of agricultural science. Agri-science must be an identifiable (dominant?) emphasis in secondary agriculture curriculum, but there are other subject areas that deserve focus as well. Agriculture is one of these, and management practices and skills in agriculture is another. The high school curriculum should include vocational education and non-vocational education in agriculture (agricultural literacy). Subject matter thrusts should include the following areas: agriculture, agricultural management (production practices), and agricultural business management. With few exceptions, none of these three major curriculum areas should be included in all secondary agriculture curriculum, and one of these three areas should probably be eliminated.

Another trend that we should seek in secondary agricultural education is to our program objectives. We have historically had a clear vocational element to our instruction, and this should continue to be the case. Yet, secondary agricultural education is and has always been vocational education and more. Secondary agriculture courses should aim at (1) performance of technical skills in agriculture (vocational agriculture), (2) applications of basic science and math skills in the technological field of agriculture, and (3) providing a basis for further study in agriculture at the postsecondary level. Career exploration is a continuing process that should be infused into all agriculture courses.

Some secondary agriculture programs have established excellent reputations in agriculture. During 1994, we continue working to keep in these positive perceptions of our programs. But secondary agriculture teachers are generalists, and few programs/courses can afford to focus exclusively on agriculture. This is why I have tried to consistently use the phrase "agriculture teacher" rather than "agriculture teacher" and/or "agriculture business teacher" in The Agricultural Education Magazine. "Agri-science" does, in fact, describe only a portion of the subject matter taught by agriculture teachers.

The Decisions & Dollars (D&D) curriculum couldn't be arriving at a better time. While we must continue to push ahead in developing strong agriculture courses in high school agriculture programs, we must remember that agricultural business management is a very important part of the curriculum as well. The D&D curriculum should be included in agriculture courses to strengthen agricultural teachers to work that bring in each of their areas of curriculum up to date.

However, a problem in agricultural education over the years has been that we have moved from one curriculum thrust to another, riding the waves in curriculum reform and rejuvenation. Such a singular focus in comprehensive, secondary agriculture curricula has limited efforts to achieve continuous and long-term curriculum change and improvement in agriculture programs. As a result, we have found ourselves facing recent accomplishments and goals behind in our curriculum, and we are always trading one new emphasis for another. The net effect is often constant changing programs that sometimes show little overall improvement.

Some might describe high school agriculture teachers as scientists. A few curriculums and skills are needed as well, such that teachers are able to simultaneously offer strong courses in agriculture, agricultural business management, and performance skill areas. There is room for all three curriculum thrusts in secondary agriculture programs, and that probably means teaching different courses today than even a few years ago. That also means that teachers must continuously look for opportunities to incorporate new ideas and topics into their teaching. The Decisions & Dollars curriculum will offer a great opportunity to upgrade the agricultural business management portion of the high school agriculture curriculum. But we shouldn't let this new curriculum product replace the subjects included in the past five years of agriculture. We can keep multiple curriculum thrusts alive, and make sure to move on to something new that is continuously changing and improving.
What is DECISIONS & DOLLARS?

A financial records and management information curriculum project of The National Council for Agricultural Education, funded through the National FFA Foundation.

It consists of:

- A 30 page curriculum guide (with objectives, interest approaches, teaching strategies, and resources) and 500 pages of color coded support materials, including the following sections:
  - teacher content
  - student reference
  - student activities, quizzes and tests (with answer keys)
- transparency masters
- Management Information System
- An Instructional Videotape

Why should D&D be a part of my curriculum?

The purpose of teaching/learning Decisions & Dollars in programs of agricultural education is to provide students a basis for making effective decisions, setting goals, assessing and solving problems, valuing financial progress and success, evaluating the management of resources and gaining skills useful in everyday life in the diverse field of agriculture.

Generally Accepted Accounting Principles (GAAP) are the financial standard used in agricultural businesses. D&D incorporates GAAP within all units of the curriculum.

Financial management and decision making are integral parts of all agricultural classroom instruction, supervised experience programs, and the FFA.

The financial pages in the curriculum package directly correspond to the new National FFA awards and degree applications.

Who contributed to the D&D project?

The D&D curriculum was developed by agricultural educators from across the United States:
- Thirteen people from industry, the National FFA Center, secondary and postsecondary schools, and state departments of education served on an action force.
- Twenty-one field test sites criticized the curriculum for 2 years.
- Forty additional pilot sites tested the curriculum for one year.
- Four secondary teachers of agriculture served on the writing team.
- A two-year formative and one-year summative evaluation was conducted.
- Internal pedagogy and accounting accreditors reviewed occurred.

Corporation sponsorship through the National FFA Foundation funded the project.

When can I get it?

D & D is coming

SOON!!

Watch for it!!

GAAP and the Way We Do Business

Just can't understand what happened. Joe and Kathy's small business seemed to be doing well. They were always busy and everyone was talking about how well they were doing. I was really surprised to hear that were going out of business. Rumor is they were not able to pay their bills. How many Joe and Kathy do we read about every week? Their dream of owning their own business came to an end because they didn't understand how to manage their finances. They were great at operating the farm and attracting sales, but were lost when it came to understanding costs and managing their resources.

In the April 1993 issue of National Wool Grower, Kay Ann Isham writes "gaps in financial records and a lack of Generally Accepted Accounting Principles (GAAP) often keep sheep producers from receiving credit."

Her article, "Bringing Home the Cash: Is There A GAAP In Your Credit?", stays on top of the sheep business involves not just the sheep, but the business management tools that can be applied to all agricultural businesses.

Joe and Kathy forgot the financial management in the operations of their business. Perhaps their idea of business performance was based on income and inventory, rather than cash flow and necessary turnover. Business performance must be measured in a variety of ways to judge the stability and flexibility of the business. "When producers are trying to decide how much less can they stand, they need to consider the impact of combinations of both cash flow shortfalls and declines in asset values" (Isham, 1993). But, as Isham points out, "Too many people don't have production, financial, cash flow and other information necessary to back up what they tell the lender", nor do they have a backup plan as an alternative in hard times. "If you look at Desert Storm or any other enterprise, any good plan has a back-up."

What was Joe and Kathy's back-up plan? Or could the case have been that by the time Joe and Kathy realized their business was in trouble it was too late?

The Decisions & Dollars curriculum is about understanding money and equipping one with the knowledge needed to put money to use. The concept begins with the most basic life skills and gravitates to complex enterprise analysis. Such things as the mechanics behind a checking account or credit card serve as the initial foundation. Understanding your own paycheck and how payroll deductions work enables you to begin capturing the essence of how budgeting and financial management can help you reach an established goal. On the more advanced side, enterprise analysis enables students to determine the most prudent method to plan and/or maximize their profits.

Decisions & Dollars is focused on opening the world of financial management and permitting one to discover the myriad of possibilities at hand.

Decisions & Dollars is designed to fit into nearly all agricultural classroom situations. Its modular design permits the instructor to add a dimension of financial understanding to an operational or technical unit. When the student understands the financial impact of an operational decision is made, the decision suddenly has greater meaning and the lesson is more firmly entrenched in the student's mind. Whether used in an agriscience or an agricultural production setting, or with students employed by a business, the concepts in the Decisions & Dollars curriculum are the essential building blocks needed for one to compete successfully.

No one wants to see a Joe and Kathy fail. In order to succeed, regardless of business type, there must be an understanding of how to effectively manage the dollars employed. Decisions & Dollars is the tool agricultural education can use to open the door of better understanding in financial record keeping and decision making. John Gois says it best, "People don't plan to fail; they fail to plan. Success is often defined as planning and preparing for meeting opportunity. Financial planning is a lifelong process necessary to survive in the modern world."

Don't we want students in agricultural education to have every advantage to be successful?

REFERENCES


Developing Money Management Skills in Youth Through Agricultural Curriculum

By Cathy F. Brown & Ronald Frederick

Dr. Brown is assistant professor of agricultural and extension education at Penn State and Mr. Frederick is an agriculture teacher at York Valley High School, Elverson, Pa.

How many decisions have you made recently that involved some form of money? How much did your last tank of gas cost? How much did you spend at fast food restaurants last month? What is the yearly cost of your car insurance? Are there ways you can lower this cost? How much do you put into a regular savings plan? Each day, you and your students make hundreds of decisions, many of them routine, that involve the use of money. They are unavoidable. Yet those decisions impact every aspect of our lives. In short, the choices we make about handling money play a major role in the type of lifestyle we have and the level of living we can afford.

Developing Money Management Skills

Money management is the process of planning and using money to get what you need and want immediately and for the future. Decision-making is a critical part of this process. Money management skills of individuals, including your students, vary widely. Some are better managers than others because they accomplish more with the same amount of money or reach goals quicker. Money management skills differ primarily because of experience and exposure. These two "T" words are keys to developing any skill, including managing money. For example, college students who tend to be the most knowledgeable about credit and housing have prior experiences in these two areas (Folk & Darum, 1991).

Financial experts agree that giving children an allowance is one of the best ways to teach money management (Waldell, 1985).

Receiving an allowance, though, is just the beginning. There are many lessons to be learned about managing money, but more importantly, there are many experiences that can be provided for students in agriculture courses to help them develop this lifelong skill.

Students' initial money management skills are learned at home. Further, parental behavioral and the way money matters are handled in the home have a lasting impact on teenagers. As soon as children understand the concept of money, they begin to develop attitudes and behaviors based on how they were taught by their parents. If parents are frugal or inclusive children in family conversations that involve money matters, it is likely that their children will exhibit similar behaviors in adulthood. On the contrary, if money is used as a source of power or is the focus of family arguments, these unstable behaviors are likely to be exhibted by children. Although parents are students' first teachers on money matters, agricultural educators can play a significant role in teaching youth to manage money. Before detailing how to help your students develop these skills, let's examine what is known about teenagers' sources of money, their knowledge about managing it, and what they buy.

Teenagers and Money

Teenagers get money from many sources: allowances, gifts from family and relatives, earnings from part-time employment, earnings from chores, and on occasion, from owning a small business. Teens have tremendous purchasing power. In 1990, teenagers spent $79 billion, $49 billion of which was spent on merchandise or received from parents as gifts (Hailey, 1992). Unfortunately, their spending habits and use of money in early adulthood can affect their financial management.

Teenagers are free to spend the money they earn on items that are important to them (cars, clothing, and recreation). Except for clothing, they spend little of their money to meet basic human survival needs.

A nationwide study of 428 high school seniors found that these soon-to-be independent consumers know very little about the products and services that they are likely to buy in the near future. These students answered correctly 49% or fewer of the questions in areas such as credit, checking/savings accounts, and auto insurance. Some groups scored worse than others. Blacks answered correctly 34% of the questions while Hispanics, the poor, and those headed for vocational/technical school each scored 35% correct on this knowledge test. Asians and whites got about 40% of the questions correctly. Females scored slightly higher (49%) than males (40%) (Consumer Federation, 1981).

Similar results were found in a survey of 450 scholars (high school juniors and seniors) who attended the 1991 Pennsylvania Farm Show. The School for the Agricultural Sciences (PGSAS). The scholars came from all of the states and represented various school types: public, private high schools, and vocational public, and private high schools and schools had special programs for those considering careers in areas such as science, math, and engineering. There were 34 females and 28 males. The students provided correct answers for less than half of the questions about payroll withholdings, liability for lost credit cards, credit card loans, lender borrowing charges, and automobile insurance. The Decisions & Dollars curriculum can change this situation.

The Decisions & Dollars Curriculum in Pennsylvania

Decisions & Dollars, a curriculum project, is designed to develop an instructional program that integrates instruction in financial decision-making and record keeping in agricultural education. It is a cooperative venture among the National Council on Agricultural Education, the University of Arizona, and the National FFA Foundation. Projected outcomes of the curriculum are an understanding of the importance of financial management to everyone in every career and integration of financial management information into existing courses. As a pilot teacher for the Decisions & Dollars Curriculum, Ronald Frederick, the co-author who teaches at Twin Valley High School in Elverson, Pennsylvania, found that his students knew almost nothing about financial management. While these teenagers think of themselves as mature and knowledgeable, they have almost no experience in managing money and making decisions that adults handle daily. Most are still on mom and dad's auto insurance policy and may carry a parent's credit card. They rarely purchase things for the family and have never arranged for a loan. One of Frederick's students quoted, "These things may be important to adults, but teenagers don't think of them on a daily basis." By their junior and senior year of high school, many may be making some of those decisions, but usually with limited knowledge.

Using the Decisions & Dollars curriculum, Frederick is giving his students a sampling of management skills that they can use in their personal lives, as well as in agricultural careers. Concepts of money management are included in numerous class projects and through required record books on supervised agricultural experiences (SAE). For example, ALJ students compute the cost of Christmas fruit baskets for the annual FFA fund-raiser. Before the sale begins, junior and seniors in the agricultural management course complete a budget to establish the selling price and estimate the profit per basket. In addition, each horticulture crop that is raised in the school's greenhouse requires a separate computation of costs to determine the selling price. Animal science students keep cost record books for the animals raised at school — rabbits, gerbils, guinea pigs, fish and chickens. These are real-life experiences for students!

Frederick exposes his 9th grade students to concepts such as developing a budget for personal financial planning including good record keeping and frequent use of computers and calculators.

Each student is required to have a record book for agriculture classes. This is an important part of the grade.

Financial planning includes good record keeping and frequent use of computers and calculators.

(continued on page 9)
It's Up To Us

Education in the United States is constantly changing, and it is up to us in agricultural education to stay on the forefront of the twenty-first century.

Financial management is a necessary topic of study for every student. It is extremely important that we, as instructors, strengthen students' financial skills to better meet financial challenges. Students must utilize their financial knowledge and skills to manage funds and meet unforeseen contingencies with appropriate decision-making skills. Dynamic changes in the economic area generate the need for innovations in our financial curriculum and call for the adoption of the Decisions & Dollars curriculums.

Serving as members of the writing team for this curriculum was a challenging and rewarding opportunity. We realize the significance of a sound financial curriculum as we work with students and their SAE projects on an everyday basis. Student's financial transactions and responsibilities don't end with the sale of a Christmas tree or beef animal. There are many financial records to work with, such as owner equity statements and cash flow summaries. Having experience in the states of Florida, Idaho, Iowa, and Wisconsin, we recognize the differences between various regions of the United States. It was a challenging task to connect financial studies from the most basic, such as checkbook procedures, to the most complex, such as income tax records. We were confronted with writing a curriculum that would prepare students for making appropriate decisions, maximizing productive dollars and enhancing the economic well-being of future adult citizens. This financial curriculum provides a kaleidoscope of financial principles and procedures, including money management, record keeping, credit management, budgeting, and tax records. These financial components are life skills that all students will need.

With the Tech Prep emphasis so strong across the country, this curriculum provides an excellent opportunity for applied math skills. The Decisions & Dollars curriculums will hopefully bring greater consistency to record and management procedures across the country. It will also assist in bridging the gap between various regions of the United States.

As we enter the twenty-first century, we must look at new and creative ways to keep agritourism education a viable part of the total high school curriculum. Agricultural educators need to take the initiative to teach applied skills. This curriculum has built-in flexibility, allowing instructors opportunities to personalize the financial curriculum, and by doing so, increase the learning efficiency of students. Our students might have their own skill levels. This curriculum will be designed to allow students to complete study units at three different levels: exploratory, preparatory, and entry.

Activities and applied teaching techniques bring a curriculum alive in the classroom. Each unit of study we formulated various taxa ideas to enhance study material. To promote a closer picture to students of the basic structure and dynamics of financial operations, it is essential that these activities be utilized. The following is an outline of various areas related to the Decisions & Dollars curriculum.

Highlights of Decisions & Dollars

- Provides diversified problem-solving examples.
- Incorporates entrepreneurship as a major part of the agriculture curriculum.
- Teaches life skills that will benefit all students.
- Emphasizes a practical record-keeping curriculum that utilizes general accepted accounting principles.
- Provides an in-depth look at all aspects of record keeping.

Success for Students Through Decisions & Dollars

- Students will gain practical skills.
- Students will acquire lifelong financial record keeping skills essential in everyday life.
- Students will learn to become successful entrepreneurs.

Advantages for Instructors

- Includes all required transparencies and other teaching materials.
- Assists in diversifying and strengthening curriculum.
- Includes up to 12 activities with answer keys for each unit.

Developing Money... (continued from page 7)

management. All students are involved in making financial decisions for the chapter.

From a teaching perspective, students may dislike money management if it is taught sequentially for several weeks. However, mini-financial management lessons can be eased into many agriculture courses throughout the year.

While you wait for the Decisions & Dollars curriculum to become available for national use, consider incorporating a budget into an existing course. The following suggestions will get you started. Remember, you will be helping today's youth develop a priceless life skill—managing money.

Suggestions for Teachers

Relate examples and activities to students' personal lives and daily experiences. Listening carefully to idle conversation among your students may give you real-life examples and situations that will capture their attention. When covering money management concepts in class, send parents a weekly newsletter with information about class activities and suggestions for extending learning at home. Have students write the newsletter. You can use a special column with your comments. Listed below are some ideas you can try in your classes:

1) Have students prepare a budget for supplies associated with a lab project.
2) Have students prepare to buy an item (car, bike, stereo, laboratory equipment, or anything of interest) that costs more than $50. Before purchasing, students should seek information about the product from various sources (Consumer Reports, sale flyers, newspaper advertisements, trips to local stores, mail order catalogs) and report why they made their final decision.

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Educational Reform: Here Today, Or Here To Stay?

No, I'm not very good in school. This is my second year in the seventh grade and I'm the same age as the others. They like me a lot, though, even though I don't say much in the school room, because outside I can talk to them about a lot of things.

This is the opening paragraph to a piece written in the 1990s, "The Poor Scholar's" Sociology, by Stephen M. Cory, a Professor of Education at the University of Chicago. The "Poor Scholar's" thoughts describe an individual who today has increasingly become the rule instead of the exception — not an unteachable individual, simply one with a different learning style. In agricultural education, this difference is manifested in two different behaviors: students who cannot comprehend academic skills and concepts unless they are delivered in an applied method, and students who cannot grasp the occupational skills and concepts delivered in an agricultural education when they are presented from a traditional agricultural production perspective. These students require a different delivery method to accommodate their unique learning styles. These students are the "Poor Scholars" and the students for which the Decisions & Dollars curriculum was developed. This situation is apparent to many outside our profession. Agricultural business and industry has often expressed its distress that the "Poor Scholar's" of today is going to be their customer of tomorrow, and they have a great concern about whether students' ability to understand, analyze, and manage personal and business resources. This curriculum material addresses that issue.

I don't know why the teachers don't like me. They never say much. Seems they think you don't know anything unless you can name the book it comes out of. I've got a lot of books in my own room at home — books like Popular Science, Mechanical Encyclopedia, and the Sears and Ward's Catalogues, but don't very often just sit down and read them through like they made us to school. I use my books when I want to find something out, like when Mom buys anything second hand, I look it up in Sears or Ward's and find out where she got it or how much she paid. I can use them in a hurry to find what I want.

How often are we guilty of teaching "what's in the book"? Instead, what we should be doing is using our technical and pedagogical expertise to develop educational experiences that are relevant and real-life applications of the competencies we are addressing.

"I don't do very well in school in arithmetic; either. Seems I just can't keep my mind on the problems. We had one the other day like this:

"If a 57 foot telephone pole falls across a cement highway so that it is 17 1/2 feet from one side and 14 9/17 feet from the other, what would be the width of the highway?"

That seemed to me like an awfully silly way to get the width of a highway. I didn't even try an answer because it didn't seem whether the pole fell straight across or not.

Do you remember the record book practices that was helped to develop for us to record important events, records and financial management? Our "real life" and "relevant" model was described this way, "Tyrone Gundlach, American FFA Degree Candidate, owns 10 bred heifers, 20 feeder pigs, 10 acres of corn, and leases another 50 acres of soybeans. How can we expect an urban student to understand this application? Where do you keep 20 feeder pigs when you live with your room and brother is a lot? How do you grasp the concept of owning 10 acres of land when your world is measured in city blocks and real estate is sold by the square foot? Our students have change. Do we also need to change?"

In the area of financial decision making, or "Poor Scholar" can be described in two ways: student who does not have a ready opportunity for an understanding of entrepreneurship, and student who has a very successful entrepreneurial or placement experience which is provided.

Remember the "Poor Scholar"?

Civics is hard for me, too. I've been staying after school trying to learn the Articles of Confederation for almost a week because the teacher said we couldn't be a good citizen unless we did. I really tried, but I don't want to be a good citizen. I did hate to stay after school, though, because a bunch of us boys from the south end of town have been cleaning up the old lot across from Taylor's Machine Shop to make a playground out of it for the little kids from the Methodist Home. I made the jungle gym from old pipe and the guys made me Grand Mogul to keep the playground going. We raised enough money collecting scrap metal to build a wire fence clear around the lot.

Are we teaching "what's in the book," or are we using our technical and pedagogical expertise to develop educational experiences that have relevant and real-life applications of the competencies we are addressing? No one ever said that this kind of teaching was easy, but from my perspective as a product of an agriculture program, it was certainly worth it.

References
The Poor Scholar's Sociology, Stephen M. Cory, Professor Education, University of Chicago, Chicago, Illinois.
The Bottom Line

By Paula Wright
Ms. Wright is a D&I project assistant and graduate research assistant in agricultural education at the University of Arizona, Tucson.

The purpose of the Decisions & Dollars curriculum project is to develop an intensive program to upgrade instruction in financial decision-making and record keeping for agricultural education. The purpose of the Decisions & Dollars curriculum is to provide students with the skills and knowledge necessary to make effective financial decisions, set priorities, assess informational sources, and solve problems. In addition, students will learn the process of budgeting, making personal financial decisions, and evaluating the management of resources and gain skills in everyday life in the diverse field of agriculture.

Why should this concern us as secondary teachers of agriculture? Decisions & Dollars is a direct result of the concern voiced by business and industry leaders participating in the judging process of National FFA Proficiency Awards and Star American FFA Degree winners. It became obvious through the judging process that students did not understand the correct procedures involved in Generally Accepted Accounting Procedures (GAAP). It is now up to us to bring ourselves and students up to par regarding industry standards.

As emphasized in the mission statement of Decisions & Dollars, financial decision making is a set of skills that each student, regardless of agricultural, socio-economic, or cultural background, can benefit from. It is our obligation as agricultural educators to provide young people with these skills.

In this unit, students will be introduced to the following concepts:

1. The importance of financial decision making
2. The role of budgeting in financial decision making
3. The use of Generally Accepted Accounting Procedures (GAAP) in financial decision making
4. The impact of financial decision making on personal and professional success

Objectives:
1. Define the term financial decision making
2. Explain the importance of budgeting
3. Identify the steps involved in the budgeting process
4. Use the budgeting process to make informed financial decisions

Unit II A: Base Financial Records

Inventory

Note to the teacher:
This unit is the first of two important "Base Financial Records" units. They define and explain the inventory and balance sheet, income statement, cash flow statement, and reconciliation of net worth. Information contained in the financial statements is useful for interpreting and understanding the financial condition of a business enterprise. An understanding of how inventory is measured and how the inventory accounts affect the financial statements is critical. The purpose of this unit is to understand the importance of inventories in the financial records of a farm and/or non-farm business.
Sixteen ratios are used to calculate business performance in the five criteria areas. Understanding the ratios is an integral component of future FFA awards and applications. A strong foundation for financial performance, the curriculum then addresses business/enterprise planning. Planning is an important process of using all available information before becoming obligated to a certain course of action. For example, how would you decide if your business should sell add 25 animals to your business, and how can you project the influence of this decision on the future of your business? This question can be determined by developing an enterprise on a partial budget. This enterprise budget then becomes part of the whole business budget, which is a systematic plan and formal technique applicable to any business setting.

Because of the vast amounts of capital needed for today's agriculture, it is important that student learn how to manage capital. This can be an input in the business process and should be treated as such. Students must be taught the value of credit, the importance of being a good credit risk, how to establish and develop credit, as well as how to determine the cost of credit. An understanding of the above measures will make practical and efficient use of borrowed capital. Rounding out the instructional units is tax management. If the agricultural education program encourages the student to earn income, the program has the responsibility to teach the student how to meet tax obligations. Students learn to appraise the effect that income taxes and other withholdings have on wages and to understand the concept of business income tax return preparation.

This instructional material has detailed objectives, teacher content pages, transparency, student activities, glossaries, and answer keys to these activities. We feel that you will find the material useful, as well as motivating.

What techniques can be used to make the material applicable to all students? In addition to the nine units covered in the curriculum, the Management Information System (MIS-unit 10) provides the opportunity to manage finances through the use of a management information system. It is important for any career that students can manage their finances and have a constant knowledge of their financial standing. The MIS gives students the opportunity to use all financial forms and complete records in a real-life situation. The value of MlS is demonstrated on the hands-on experience of using financial records and management information. Examples of these hands-on experiences might include:

A. Individual SAE: Entrepreneurship, Placement, and Direct Laboratory offers opportunities for students to keep financial records and to make decisions about dollars. Using MIS to keep individual SAE records personalizes the instruction for each student. The student may keep actual records on established SAE programs, or they may utilize hypothetical concepts to increase their knowledge and improve financial management.

B. School-Based Enterprises: For beginning students or students with unpaid learning experiences, teachers may find it easier to have students keep records and make financial decisions as a group on such enterprises as the school greenhouse, animal science facility, or any other school-based enterprise.

What effects will Decisions & Dollars have on an FFA member? As a subcommittee of the Decisions & Dollars Task Force, the FFA Subcommittee on Awards and Degrees is looking at incorporating the concepts taught in Decisions & Dollars into the revisions being made to the National FFA Proficiency and American Degree Awards. These changes are in the continued success of the programs from both a sponsor and student prospective.

Are you ready for the transition? The key to the success of the Decisions & Dollars curriculum is the local teacher of agriculture. We're bringing ourselves up to industry standards, and our students the materials, and apply the concepts taught. It is paramount that teachers involve themselves at the inception of the curriculum, with teacher cooperation and resources, and reap the benefits of observing your students making sound financial decisions.

Kevin Calhoun's placement experience is a greenhouse gives him many opportunities in financial management and decision making. (Courtesy of Jim Landberg)

The Decisions & Dollars curriculum allows the student and teacher to develop basic financial living skills into comprehensive economic principles and analytical procedures. At the present time, most students are not developing a total dollar management concept. They are still working with record books, but WHY is it to learn and make decisions, or simply to be records for grades or rewards (recognition not necessarily based on sound financial management)?

It will be interesting to see what changes take place as a result of the Decisions & Dollars curriculum. First and foremost, we will look forward to students and teachers discovering that dollar and sense management (personal as well as business) is a progressive need of the individual.

At the exploratory level, first-time students in the agriculture program may have no need or reason to manage dollars. Whatever the sources of the income, they are at liberty to spend the money at their discretion. The end results in most cases are "easy come - easy go." Accepting the fact that even a majority of juniors and seniors at this stage of expertise in dollar management, it is easy to perceive a
The Bottom Line . . .
(continued from page 12)
agriculture department. One group may be assigned to books, one to the laboratory, another to major labora
tory equipment, (greenhouse, etc.). Divide the lab into segments according to your facility. When the various segments are completed, save them in
next exercise on balance sheets.
2. Visit a business that keeps daily inventories and update your notes.
3. Depreciate some major item or items using Suggested Teaching Activity #1 using
methods.
4. Complete a personal inventory of your SF program and personal assets (Activity
1).
5. Complete Application Activities (Activity #2).

Unit V:
Base Financial Records

'Reconciliation of Owner Equity'

Note to the teacher:
This unit is the last of four important "Financial Records" units. They define and explain the balance sheet, income statement, cash flow statement and reconciliation of owner equity. Information contained in financial statements is useful in understanding and evaluating the financial condition of a business enterprise. The purpose of this unit is to utilize a balance sheet and an income statement to reconcile owner equity.

Objectives:
Upon completion of this unit, students will be able to:
1. Given a sample balance sheet and a sample income statement, prepare a statement of owner equity.
2. Compute the change in owner equity.

Interest Approaches:
1. Share with the students some complete statements of owner equity and ask them to determine the origins of the figures on the state
2. Given a sample balance sheet, prepare a statement of owner equity.

Teaching Materials:
1. Overhead transparencies
2. Statement of owner equity

Marketing Your Program

Today, many consumers use blanket state
ments when dealing with the perception of
agriculture and the people involved in this
very important industry. Today's perceptions about agricultural education seem to fall in line with other vocational education perceptions as viewed by the public.
Perception: Agriculture is only farming.
Perception: Industrial technology is only woodworking.
Perception: Home economics is only sewing and cooking.
Perception: Business education is only typing.
I did not say that those perceptions were true, but it does not matter what I think. It is what the public perceives as being real that counts.

The general public often times perceives voca
tional education in its mind from its own past
experiences. Many times this is the past experi
ence of 10 years or more. In the educational
area we have gone from Great Wood tech
iques and cows, plows, and now to high tech
high touch curriculums of genetics, robotics
plants, and goods. Schools have added
opportunities, computer programming, biotechnol
ogy and a whole new source of technology.

Agricultural education has expanded and carry vocational
education into the 21st century. "TEAM Educa
tion" is alive and well in Iowa! In many schools, agricultural education is a vocational
course that is geared to go into the 21st century
without a big shock for change.
The great flood of '93 have another impact on rural areas economically, socially,
and educationally. Local school budgets may
become strained, businesses nervous, and rural
consumers might become more conservative as rural
income decreases.
The time to act is here. TEAM Agricultural
Education needs to keep telling the story of food
production from producer to consumer. Young
people need to be made aware of the importance of agriculture and the business of farming.
The land is well cared for by farmers and yet, as
stewards of the soil, their place in Iowa educa
tion is being forgotten.
Approximately 25% of this nation's population
produce enough for the other 98% and still
export food products to other countries. In Iowa, approximately 11% are engaged in production
agriculture. Consumers are demanding safer
products, healthier foods, and a safer envi
ronment. Farmers as consumers also want safer
products, healthier foods, and a safe environ
ment. The two are partners for progress. They are both on the same team, both can win, both
will benefit, but both need to be informed and
continually educated as to the concerns before
them.

Agricultural education programs are offered in only 256 schools out of 418 public schools
in Iowa, Iowa has the #1 farming in the world.
Iowa's educational system is at the head of the class. Now is the time to put Iowa at the "Head of the Table!"

Agricultural education will help thrust this
dynamic industry into its correct place of
prominence. To do this, we need all schools to
have access to agricultural education curricu
lum. Elementary schools should teach this
area of agricultural education and agricultural awareness. Universities should promote and
train educators about consumer topics, and
Iowa should promote value added products and
attract value added jobs. Rural communities
need to develop action plans to attract small
industries that process raw products into a con
sumer-ready, value-added product. Biodegrad
able golf tees should be made in Iowa instead
of in Massachusetts from our own sources. If we
can do some of these things, we may help to
preserve the rural social fabric of Iowa, and
instead of putting plywood in the windows of
main street we can begin to replace it with
panes of glass for new businesses and vitality
in rural Iowa.

None of this will be easy, but as Daniel
Webster stated, "All things great begin with the
soil," so it is time to set the table and begin a
new chapter in economic, educational, and
agricultural pursuits of excellence.

Coming in April . . .
Land Laboratories
Collaborative Relationships
With Agricultural Businesses
and High Schools

by Jack Easley

The definition of the word "collaborative" according to Webster's Collegiate Dictionary is:

Collaborative relationships form a link with an agricultural business, in which an ongoing exchange of some type is pursued and which aids our educational process and their business, so that a collaborative relationship exists, and as presented in this paper, we find that we can link to both businesses and high schools simultaneously to form a larger collaborative relationship.

A collaborative effort has existed for some time in the small university agricultural education department in which I have taught. Also, we have completed the second year of a pilot project that seeks to expand collaboration to include high schools as a part of our college program. I am speaking of a program that is known as cooperative education.

Cooperative education is a commonly used management education experience program in which the student is encouraged to work in a career building job in an agricultural business in his/her field of education. Our students are encouraged to work in a job at a level appropriate to their educational attainment, as early as their educational program permits.

To have adequate numbers to operate a complete program we include all agriculture majors in the program. Over the years we have averaged a participation of 13-26% of all agriculture majors and about 33% of my advisories. We have approximately 12 employees that cooperate with us on a regular basis. They annually hire from one to eight students each. We have a file of approximately 40 employers. The area with the strongest program is crop management. While earning three hours of credit, our students work for a summer or two as a crop scout for a consultant and later work for six months as a research technician in agricultural chemical research for such companies as Monsanto or Dupont. The crop scouts, as freshmen, earn $1,000 to $2,100 a month and in some cases get free room and board. Later, a senior working as a research technician may earn three to six hours of credit and as much as $1,250 per month.

The employers are enthusiastic about the students we send. We have often been commended on the quality of students we provide.

Certainly, many factors are at work in this quality, but three seem very important — academic credit for accountability, strong practical laboratory experiences in our agriculture courses, and placement with a capable crop consultant with human relations skills.

It goes without saying that the students are pleased with the pay and college credit. Also, they are enthusiastic about the credibility of our students on the job market, in part because of this collaborative program with professional employers. Finally, our students often have an option to take permanent jobs after graduation that are more readily available to them because of the cooperative education experience. We have had graduates hired in such positions as junior partners in crop consulting firms, unit managers on corporate farms, and assistants in research support on experimental farms.

This article will move from a discussion of our specific program to consider how what your program has to gain from a collaborative relationship, the foundation of a good program, and what pitfalls need to be avoided to have an effective program.

Collaboration Is Beneficial

Your program can gain greatly from a collaborative relationship with business and industry. A few of these benefits are credibility among potential employers of your student, credibility among high school students and teachers for recruitment, and stronger relationships with high school departments. Some examples from the experience of my own department illustrate these benefits.

We have accrued a great deal of credibility among potential employers because of our cooperative education program. Much of the work of our department and our students with industry through cooperative education has given us an excellent reputation for preparing students who are willing and able to work.

High school students and teachers have also been attracted to our program because our credibility has been heightened by the
cooperative education program. I believe that this cost/ benefit is correlated strongly to the perception that we are tied to the real agricultural world, giving them a chance to develop new skills rather than the perception that they are only developing some academic skills and experiences in our program.

Finally, the most important relationship of all — the university agricutural education department and the high school agricultural education department — can be strengthened as the two could be working together for a collaborative relationship with agriculture business. This is something we have tried recently in our program, on a small scale, and it seems to be received quite well.

We are still in the pilot project phase of including high school programs in our cooperative education programs with agricultural business. But the early part of the pilot project has been very good and we have been able to have a chance to recruit additional students. The high school agriculture departments have also benfited, as high school students have recognized the great career potential in today's agricultural industry, thus increasing high school agriculture enrollments.

A collaborative relationship with agriculture industry ties you to "the real world", and challenges you to keep abreast of contemporary issues in agriculture. The much needed perspective that comes from "the real world" enhances the adaptability of your entire program and the ability to meet the future challenges of agriculture and education. Those linkages to agricultural industry provide a challenge and often a method for remaining current in education and agriculture. For example, a student who gained experience in a milk production plant leads to a current perspective in his discussion and action at our own school-operated dairy plant.

Potential Areas For Collaboration

Examples in this article spring from cooperative education. However, many other areas, both traditional and non-traditional, will lend themselves to collaborative relationships. For example, future collaborative relationships among materials science, high school, and agricultural industry may emphasize computer software design and testing, enhancement of minority participation in agricultural crops, microbiology laboratory skills, or new agricultural marketing linkages. We in agricultural education are beginning to see more clearly the nature of a new agriculture in a high tech society. And subsequently, we can see that collaborations are key to dynamic progress in agriculture and education.

Foundations of a Collaborative Program

Once you have decided to pursue a collaborative relationship, you should remember that you are trying to establish a relationship with people who must make a profit from all that you are doing. In effect, your agricultural education program will be selling its product to the business. Therefore, they must make a profit from something your program. For example, they can hire your students for six months rather than for an entire year. They can increase their profits by the six months saved, or it may be that they get greater flexibility in the scheduling of the work week using the personal projects program. However, you should be aware of this, and your students into business needs to be ready for quality work. Thus, you need to realize that business will be most interested in your strengths, not weaknesses.

Your best chance of providing business good input is to provide them service for some strong aspect of your program. We want to use industry to overcome a weakness, and at some point in the future may be feasible, but first you must establish a small business foot forward.

Small university programs of agriculture education should be able to broaden the collaborative relationship by including high schools. For example, in our cooperative education program we are able to satisfy more employers because the high schools increase our enrollment. And with more employers satisfied, we are able to make more contacts for potential business relationships or future employment of students.

Pitfalls to Avoid

Remember, in getting involved in any service program you must guard the preparation program, high school curriculum, and your job description, and involvement relationships.

You may need to change a few courses to better accommodate employer or student needs, and to guard against movement that decreases teacher preparation at the college level. University teachers spend time in a sector such as a collaborative relationship, that sacrifices quality time in teaching, in a similar manner, effort should be made so that the high school program is not suffering the state-approach curriculum by a collaborative relationship.

University teachers should remember that promotion and tenure may not be your only efforts. There may be new curriculum you should insulate that faculty and current administrators are in accord with the team of collaborative program. High school teachers should always ascertain the desire of collaboration to their principal and members before embarking on such a project.

Remember that a new auxiliary aspect to your program may be the primary function of some other institution within your neighborhood. For example, if you get involved in computer software development, you may run into opposition from the computer science department at your university or a curriculum development team in your state department of education.

Success Lies In Your Best Qualities

As mentioned above, the strong points in your program are in some areas in which industry should be approached. By examining the agricultural industry with which you have natural contact, you can locate the industry that has the greatest need for your product.

With the knowledge of what they need and the student product you have, you can confidently approach them to sell your product. As they realize that their business can benefit while they do their part for higher education and public school education, you can see the establishment of a productive long-term collaborative relationship.

Leadership Development...

(cont'd from page 15)

of反射

(4) Are you a warm, concerned, and genuine currying type of person?

(5) Are you an interesting, informed, and somewhat entertaining type of individual?

(6) Do you have tendencies toward arrogance, conceit, crudeness, or selfishness?

(7) Are you adventurous or safe?

In some of these traits of attitude there is a rather thin line that exists between them and the attributes of character. The serious question that deserves hard curricular examination is what we are doing to develop such attributes and attitudes in our students as a planned strategy, rather than hoping that such will occur as a happy outcome.

Techniques

Leadership techniques involve capabilities such as the ability to plan, to conceptualize, to delegate and to follow up, to communicate, to diagnose before prescribing, to prescribe on the basis of sound and insightful diagnostic, to propose, to correct and to teach. For example, how does an ETA advisor help teach a student the process of helping others see their way through a problem, be it simple or complex? How can one teach the process of keeping confidences where such must be kept? How does one get at the root causes of a personal problem without offending? Some techniques involve highly sensitive interpersonal skills. Others are perhaps more process oriented, but both impact on other human beings.

Teachers should utilize executive meetings consisting of chapter officers as a leadership training forum for the enhancement of leadership techniques. This session should belong primarily to the advisor with adequate student involvement in the planning process. Officers may be taught as they practice their role and rehearse with advisor supervision. Here they can examine possible scenarios and learn to combine the familiarity in a setting with a minimum of anxiety.

Utilizing such sessions to maximize leadership development creates an opportunity for the advisor to insist on a level of excellence commensurate with student ability. The chapter meeting, the parent and student meetings, or other public occasions then become the responsibility of the chapter officers in fact and in performance. Under such circumstances intellectual growth and leadership skills are greatly enhanced. It is a doing-to-learn educational technique in which students have appropriately picked out ourselves历史性地.

Summary

In the effort to create proficient technocrats we have, perhaps, neglected a curricular coherence in character education. With shifting demographics it may require a reconsideration of issues that we in the agricultural community have previously avoided. It will require a creative educational effort not unlike the pioneering work that was done in the case of specific production agriculture. It seems there is a compelling social need to do just that. An educational program that includes a combination of time-proven values has an added advantage, namely it is not afflicted with technological obsolescence.

References


The Bottom Line

(cont'd from page 15)

2. Balance sheet

3. Income statement - accrual

B. Activity

1. Statement of owner equity

Suggested Teaching Activities:

- Activity 1 # Select horticultural, natural resources, productivity or work experience application area and exploratory, preparatory, or entry level activity.

1. The curriculum is designed at the exploratory level. Higher level examples and concepts are needed as follows: "pragmacy level". These level procedures are intended to incorporate the higher level extended examples and concepts as necessary appropriate for such situations.
Using Portfolios To Assess Student Performance

Many secondary agriculture programs neglect to consider alternative methods to assess student performance. A heavy reliance on traditional testing techniques (i.e., proctoring) precludes teachers, students, administrators, and parents from observing and assessing the full range of student capabilities. Conventional testing techniques, although acceptable with other evaluation techniques provide a holistic approach to measuring student growth and performance. One evaluation technique that has been suggested as an alternative for a companion to traditional testing is portfolio assessment.

What Is Portfolio Assessment?
Portfolio assessment is a systematic and organized collection of evidence used by the teacher and students to monitor growth of the student's knowledge, skills, and attributes in a specific subject area.

What Constitutes A Portfolio?
Portfolios may contain all of a student's work during an academic period, provide examples of what students consider their best work, or include representative samples of student performance on a range of categories.

What Should Be Included In A Portfolio?
Samples that should be included in the portfolio must be clearly established at the beginning of the school year. Examples of what a portfolio could include are: student-teacher selected work samples (e.g., drafts, notes, diagrams, journals, essays, lettered, standardized test scores, and a variety of books and articles read, drawings, and video tapes), student's self-evaluations and reflections, teacher observations, peer comments, and parents' perceptions about student development. Samples of student work may be chosen at the end of the grading period, semester, or year. Students should be encouraged to study their portfolios and to select those pieces of work that best represent their growth or achievement in a given area.

How Are Portfolios Evaluated?
The responsibility for evaluating portfolios lies with the teacher and the student. Both student and teacher should review the pieces in the portfolio and discuss what has been accomplished and what should be done in the future.

The main purpose of the portfolio discussion should be for sharing reactions and ideas. Portfolios can be evaluated in several different ways. A portfolio evaluation scale can be established that incorporates standards to be evaluated; for example, the teacher could use any number of evaluation scales that represent each level of performance. Teachers should clearly describe expectations in performance, and provide students with goal-setting criteria, and required work. Portfolios can also be evaluated on individual standards of growth within the portfolio itself over a given time period. This process has been suggested when assessing portfolios: (1) focus — the question to be addressed by assessment process, (2) structure — the application for the assessment, (3) mode — the kind of information to be included in the portfolio, and (4) locus of control — the person involved in the assessment.

What Are The Advantages Of Using Portfolios?
- Portfolios in combination with other forms of standardized tests provide a more comprehensive and accurate picture of student growth.
- Portfolios enhance student responsibility to enlarge the view of what is learned, to practice the processing of information, and create developmental points of view of student learning.
- Portfolios encourage students to see a project as an ongoing process that never truly reaches closure.
- Portfolios give students more control over their own grading.
- Portfolios force students to become better critics of their own work.
- Portfolios encourage the teacher to coach and an enabler in the learning process.
- Portfolios help teachers to assess the level of teaching skills and development.
- Portfolios assessment fosters a high level of interaction among the teacher and students.
- Portfolio assessment provides an easy source for program, curriculum, and teacher staff development.

What Are The Disadvantages Of Using Portfolios?
- Portfolio assessment demands more time from the teacher to assess student progress from students to prepare and evaluate the portfolios.
- Portfolio assessment forces teachers to reconsider and modify their traditional assessment procedures and orientations.
- Portfolio assessment, with the emphasis on revision and the opportunity to revise some failed materials, may spoil students and let lazy students get by with help from teachers and peers.
- Portfolio assessment challenges teachers / administrators to go beyond traditional methods of accountability for assessing student performance.
- Portfolio assessment requires administrative support.
- Portfolio assessment requires special training for staff development.
- Portfolio assessment procedures may be difficult for teachers to clearly explain to students.
- Portfolio assessment is subjective process; therefore, the validity and reliability of the assessment methods can be questioned.

What Factors Need To Be Considered When Implementing Portfolios?
Several factors that need to be considered as agriculture teachers debate whether to use portfolio assessment in their classroom include:
- Who are the intended audiences for the portfolio and what do the audiences want to know about student learning?
- What aspects of student growth cannot be measured by test scores?
- What types of evidence best demonstrate student progress toward teacher-identified learning goals?
- What materials should be included in portfolios?

Summary
Agriculture teachers should consider using portfolios to evaluate students. Traditional testing techniques provide only a narrow understanding of student performance; student assessment should reflect the multiple outcomes of an agriculture program. Portfolios assessment can provide a continuous, multidimensional, collaborative, and authentic measure of student growth and performance.

Developing Money...

(continued from page 9)

(3) Provide student with copies of a typical paycheck stub for a student who works part time as an adult who is employed full-time. As a class activity, discuss the similarities and differences in the pay stubs (taxes, unemployment, health and life insurance, built-in savings deductions).

4) Invite someone from the banking industry to discuss the following with your students:
a) The types of checking and savings accounts that are available, check bouncing fees that customers and businesses must pay, and credit cards, and their use.
b) Information bank consider before loaning consumers money.

5) Have students compare the cost and features of credit cards offered by local banks.

6) Invite an insurance agent to discuss the concept of risk management. Ask the agent to relate specifically to auto insurance or the cost of replacing greenhouses or equipment that is part of your program.

7) Have students work in groups to compare auto insurance costs for the same coverage offered by different companies. Compare the cost of insurance for different types of cars (e.g., family car that have similar value can be a real eye-opener.

Final Thoughts
While it is important to prepare students academically so that they can obtain a good job to earn a living or to continue their education, it is equally important that they learn to manage the money they will earn. To a degree, it matters not how much money they make, but how they manage what they earn. Developing management skills in youth need not be confined to courses such as consumer economics, consumer education, business, or home economics. There are many opportunities for agriculture teachers to include concepts of money management in existing courses. Remember, the ability to manage money is directly related to exposure and experiences.

References
# DECISIONS & DOLLARS

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