This is the fifth in a set of 36 teacher guides for the Entrepreneurship Training modules and accompanies CE 031 038. Its purpose is to give students some idea of what it is like to own and operate a fertilizer and pesticide service. Following an overview are general notes on use of the module. Suggested steps for module use contain suggestions on introducing the module, a brief discussion of the nine units, responses to learning activities, suggestions for summarizing the module, and responses to the quiz. The units are Planning a Fertilizer and Pesticide Service; Choosing a Location; Getting Money to Start; Being in Charge; Organizing the Work; Setting Prices; Advertising and Selling; Keeping Financial Records; and Keeping Your Business Successful. Each unit contains a case study; responses to individual activities; responses to discussion questions; and a group activity. Suggested readings for the teacher and a list of goals and objectives complete the module.
GETTING DOWN TO BUSINESS:

Fertilizer and Pesticide Service

Module 5

Teacher Guide
The information reported herein was obtained pursuant to Contract No. 300-79-0535, Office of Vocational and Adult Education, U.S. Education Department. Contractors undertaking such projects under government sponsorship are encouraged to document information according to their observation and professional judgment. Consequently, information, points of view, or opinions stated do not necessarily represent official Education Department position or policy.
GETTING DOWN TO BUSINESS:

Fertilizer and Pesticide Service

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May 1981

Developed at the American Institutes for Research under support from the Office of Vocational and Adult Education U.S. Education Department
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The purpose of these Getting Down to Business modules is to provide high school students in vocational classes with an introduction to the career option of small business ownership and to the management skills necessary for successful operation of a small business. Developed under contract to the Office of Vocational and Adult Education, U.S. Department of Education, the materials are designed to acquaint a variety of vocational students with entrepreneurship opportunities and to help reduce the high failure rate of small businesses.

As the students become familiar with the rewards and demands of small business ownership, they will be able to make more informed decisions regarding their own interest in this career possibility. It is hoped that, as a result of using these materials, some students will enter small business ownership more prepared for its challenges. Others will decide that entrepreneurship is not well suited to their abilities and interests, and they will pursue other career paths. Both decisions are valid. The materials will encourage students to choose what is best for them.

These Getting Down to Business modules are designed to be inserted into ongoing high school vocational programs in the seven vocational disciplines—Agriculture, Distributive Education, Occupational Home Economics, Business and Office, Trades and Industry, Technical, and Health. They will serve as a brief supplement to the technical instruction of vocational courses, which prepare students well for being competent employees but which generally do not equip them with skills related to small business ownership. The modules are self-contained and require a minimum of outside training and preparation on the part of instructors. Needed outside resources include only those types of materials available to all students, such as telephone directories, newspapers, and city maps. No special texts or reference materials are required. For further optional reading by instructors, additional references are listed at the end of the Teacher Guide. An annotated Resource Guide describing especially valuable entrepreneurship-related materials is also available.

The purpose of this module is to give students some idea of what it is like to own and operate a fertilizer and pesticide service. Students will have an opportunity to learn about the kinds of activities and decisions a fertilizer and pesticide service owner is involved in every day. While the module is not a complete "how-to" manual, the individual activities will provide your class with the chance to practice many of these activities and decisions.

Today, owners of small businesses face many problems—some minor, some not so easily taken care of. These problems are reflections of the changes our society is going through. While this module cannot address itself to all of them, the discussion questions at the end of each unit are designed to give students an opportunity to explore possible solutions.
You may want to present this module after completing Module 1, Getting Down to Business: What's It all About? Module 1 is a 16-hour program covering a more in-depth approach to owning any small business. The terms introduced in Module 1 are used in this module with a restatement of their definitions. Also, the forms used are the same, with some minor changes to fit a fertilizer and pesticide service specifically. Module 1 provides an introduction to owning a small business in addition to some skills and activities that, due to their general nature, are not covered in this module.

Content Organization

Each unit of the module contains the following:

1. Divider Page—a list of what the student should be able to do at the end of that unit.

2. Case Study—an account of a fertilizer and pesticide service owner in the field.

3. Text—three to four pages outlining business management principles introduced in the case study but focused more on the student.

4. Learning Activities—three separate sections, including:
   a. Individual Activities—finding information given in the text or applying information in the text to new situations.
   b. Discussion Questions—considering broad issues introduced in the text; several different points of view may be justifiable.
   c. Group Activity—taking part in a more creative and action-oriented activity; some activities may focus on values clarification.

General Notes on Use of the Module

Instructional Time:

Each unit = 1 class period; total class periods = 9
Introduction, quiz, summary = 1
Total instructional time = 10 class periods

The case study and text are central to the program's content and are based on the instructional objectives appearing in the last section of this Guide. Learning activities are also linked to these objectives. You will probably not have time, however, to introduce all the learning activities in each unit. Instead, you will want to select those that appear most related to course objectives, are most interesting to and appropriate for your students, and are best suited to your particular classroom setting. Certain learning activities may require extra classroom time and may be used as supplementary activities if desired.
Before presenting the module to the class, you should review both the Student and Teacher Guides and formulate your own personal instructional approach. Depending on the nature of your classroom setting and the students' abilities, you may want to present the case study and text by instructional means that do not rely on students' reading—for example, through a lecture/question-answer format. Case studies and certain learning activities may be presented as skits or role-playing situations.

No particular section of the module is designated as homework, but you may wish to assign certain portions of the module to be completed out of class. You may want students to read the case study and text in preparation for discussion in the next class period, or you may want them to review the material at home after the class discussion. You may also prefer that students read the material in class. Similarly, individual activities may be completed in class or for homework. Discussion questions and group activities are specially intended for classroom use, although some outside preparation by students may also be needed (for example, in the case of visiting a small business and interviewing the owner).

Methods that enhance student interest in the material and that emphasize student participation should be used as much as possible. Do not seek to cover material exhaustively, but view the course as a brief introduction to entrepreneurship skills. Assume that students will obtain more job training and business experience before launching an entrepreneurial career.

The quiz may be used as a formal evaluation of student learning or as a self-assessment tool for students. Answers to learning activities and the quiz are provided in a later section of this guide.
SUGGESTED STEPS FOR-MODULE USE

Introduction (10-15 minutes)

I. In introducing this module you will probably want to find out what students already know about fertilizer and pesticide services.
   - Ask what services they know about.
   - Ask if they know about any small services.
   - Ask them what they think the advantages of owning their own service might be.
   - Ask them what disadvantages they see.

II. Discuss small businesses briefly. Over 90% of all businesses in the United States are small businesses. In this module we will be dealing with very small businesses, meaning a self-employed owner working alone or with one to four employees. Often small businesses are owned and run by members of a family.

III. Discuss the purposes of the module:
   - To increase students' awareness of small business ownership as a career option.
   - To acquaint students with the skills and personal qualities fertilizer and pesticide business owners need to succeed.
   - To acquaint students with the kind of work small business owners do in addition to using their vocational skills.
   - To expose students to the advantages and disadvantages of small business ownership.

IV. Emphasize that even if students think they lack management aptitudes, some abilities can be developed. If students "turn on" to the idea of small business ownership, they can work at acquiring abilities they don't have.

Also, students who work through this module will have gained valuable insights into how and why business decisions are made. Even if they later choose careers as employees, they will be better equipped to help the business succeed because of their understanding.
Unit 1 - Planning a Fertilizer and Pesticide Service (1 class period)

I. Case Study: Carl Eaglehorse begins to plan his own business. He has the vocational skills for the business and is acquiring the business skills. He considers the competition in his area and learns about legal requirements.

Text:
- Personal Qualities
- Services, Customers, and Competition
- Special Services to Help the Business Compete
- Legal Requirements

II. Responses to Individual Activities
1. Possible answers may include getting licenses (pest control dealer, business operator, pest control advisor, pest control operator), choosing a legal form of business, or getting proper insurance. Other reasonable answers are also acceptable. Answers concerning your area will vary.
2. Answers will vary.
3. Answers will vary.
4. Answers will vary.
5. Answers will vary.

III. Responses to Discussion Questions
1. Generally, large agri-business areas are better suited to large business operations with lots of working capital. Large farms often have their own equipment for applying fertilizers and pesticides.
2. He preferred the satisfaction of doing his own work to the security of being an employee or even of getting a good salary. This is a good place to discuss non-monetary rewards of small business ownership.
3. Discuss here bankruptcy proceedings, problems with unpaid creditors, etc.

IV. Group Activity
The purpose of this activity is to give students a first-hand feel for fertilizer and pesticide service ownership or, at least, management. An enthusiastic speaker is the best choice, whether owner or manager. Be sure the speaker knows the kind of questions he or she should address at least a week before the presentation, since the focus is on management activities and requirements, and
since the speaker may find this a little different from the usual class presentation.

You will probably want to allow questions and answers after the presentation. You may also want to have a brief discussion of what the class thought about the presentation. Of course, it is important that the speaker receive a thank-you letter.

Unit 2 - Choosing a Location (1 class period)

I. Case Study: Carl decides to move to another state where his business has a better chance of succeeding. He gathers information to confirm that his services will be needed. He decides what kind of place he needs, chooses a location, and arranges to have it equipped as he needs it.

Text: Picking an Area
Picking a Spot

II. Responses to Individual Activities

1. Talk to people who have worked in the business, or talk to a city or county planning department.

2. Answers will vary.

3. Space to store and care for equipment, space to store supplies, and office space.

4. $2,000 x 12 months x 3 years = $72,000

5. To be far from competition, noticed by people going by, and close to customers.

III. Responses to Discussion Questions

1. If you have reason to think your business might "catch the overflow" from another, it could be good to be close to your competition. For example, if a fertilizer and pesticide service is always backlogged, you might benefit. For some kinds of businesses that sell consumer products, like car dealers, it is better to be close to competition because people like to shop around.

2. A new highway might take all the traffic off the county road. New houses might be planned all around the business. New zoning might prohibit farm service businesses in the near future.
3. You have to make the best estimate you can of your expected income and expenses. This involves deciding on a price for your services, discussed later in the module.

IV. Group Activity

The purpose of this activity is to give students the opportunity to evaluate the locations of real-life fertilizer and pesticide services. In doing so, they will be applying what they learned in this unit.

First, students visit business locations to evaluate their suitability. Second, students ask the owners why they picked those locations. Students can then compare their own assessments of the locations with the owner's assessments.

Unit 3 - Getting Money to Start (1 class period)

I. Case Study: Carl adds up his expected business expenses over the first six months of operation. He uses his savings, borrowed money, and invested money for equity capital. Then he fills out a bank loan application and prepares a resume (not covered further in this module), a business description, and a statement of financial need.

Text: Description of Your Business
      Statement of Financial Need

Optional Points to Present:

- Getting estimates of expenses involves a lot of information gathering from suppliers, sellers of equipment, insurance agents, advertisers, etc. This takes time, usually several days or weeks, since you'll want to shop around for the best prices.

- A business description has to sell the business idea to the lender, yet remain truthful and not exaggerated. Lenders have experience and know what reasonable ideas and expenses are. If you overdo it, you may not get the loan.

- There are many sources of information on writing resumes. Your counseling or work experience office probably has several.

II. Responses to Individual Activities

1. Local financial institutions, like banks. The Small Business Administration. The Farmers Home Administration.

2. The description should "sell" the idea while remaining truthful. It should include: (1) kind of business and service
 provided; (2) location; (3) competition; (4) customers; and (5) plans for success.

3. Starting expenses, money on hand, loan needed.

<table>
<thead>
<tr>
<th></th>
<th>Starting Expenses</th>
<th>Money on Hand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$ 6,000</td>
<td>Cash on Hand $10,000</td>
</tr>
<tr>
<td>Building Expenses</td>
<td>6,000</td>
<td>Gifts or Personal Loans $10,000</td>
</tr>
<tr>
<td>Repairs and Renovations</td>
<td>10,000</td>
<td>TOTAL $20,000</td>
</tr>
<tr>
<td>Equipment and Furniture</td>
<td>50,300</td>
<td></td>
</tr>
<tr>
<td>Fertilizers and Pesticides</td>
<td>58,000</td>
<td></td>
</tr>
<tr>
<td>Office Supplies</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Advertising</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>$131,500</td>
<td>TOTAL STARTING EXPENSES $131,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOTAL MONEY ON HAND 20,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOTAL LOAN MONEY NEEDED $111,500</td>
</tr>
</tbody>
</table>

III. Responses to Discussion Questions

1. He has not put up enough money. Banks will not take a risk when they stand to lose a lot of money if things go wrong but the owner stands to lose only a little.

2. She has not made a realistic commitment to making the business succeed. The banker will know that the odds are strongly against a business owner who does not have a real grasp of the vocational and business skills and hard work needed to make a business succeed.

IV. Group Activity

The purpose of this activity is to have students get a realistic idea of costs in your area. Owners will probably mention many specific costs not covered in this module, and this too will be useful to the students.
Unit 4 - Being in Charge (1 class period)

I. Case Study: Carl decides to hire a pest control and fertilizer advisor and a secretary. He writes a job description for the advisor, advertises for applicants, and screens them before hiring one.

Text: Dividing the Work
Different Kinds of Tasks
Mixture of Tasks
Hiring a Worker

Optional Points to Present:

- Being an employer means taking on both financial and personal responsibility for an employee. The text does not cover such things as employee benefits, payroll taxes, and W-4/W-2 forms, but you may wish to mention them.

- You might want to talk about employer-employee relations and different management styles, such as "participatory management," in which employees have a say in the way they do their jobs.

II. Responses to Individual Activities

1. Anything students find that is pertinent is acceptable. You can also have them look at trade journals if you wish.

2. Any general business or fertilizer and pesticide service skill is appropriate here. For example: "apply sprays, hire workers, plan advertising, keep customer accounts, do bookkeeping," and similar answers are good.

3. This ad should request applicants with a pest control advisor's license, a pest control operator's license, and skill at advising on and applying fertilizer. Students may also require more training and experience if they choose. The ad should list at least the job title, training and experience needed, and the business phone number or address.

4. (a) Write a job description—This step is important because before you start hiring, you must have a clear picture of what jobs you need filled and what kinds of people you need to fill them.

(b) Advertise the position—Clearly describe the qualifications you want in your employee.

(c) Look at applicant's training and experience—Here you are trying to match employees with tasks they like and do well.
(d) Interview applicants—Be interested in your applicants as people.

(e) Check references—By talking with previous employers, you may obtain information that could affect your decision to hire or not hire a particular applicant.

5. This should include Social Security (FICA), federal withholding tax, state withholding tax (if any), unemployment insurance, and worker's compensation.

6. Answers will vary.

III. Responses to Discussion Questions

1. (a) Give each worker different kinds of tasks. This is good because each person specializes in one kind of work and becomes very efficient. It is bad because it's not too flexible. If Carl gets sick, Darcy can't take over for him.

(b) Give each worker a mixture of tasks. This is good because it is flexible. Whether farmers want fertilizer or pesticide advice or spraying, any employee can do it. It is bad because each worker must be trained to do everything. Such workers are hard to find, and they may ask for high salaries.

2. Good job descriptions help prevent mixups in responsibility and misunderstandings. Writing the owner's job description helps ensure that all job tasks of the business are divided and that responsibility, or authority do not land on the owner by default. This can prevent hard feelings later. Students may have other ideas.

3. Any reasonable answer is okay: trade journals, farm journals, community bulletin board, etc.

IV. Group Activity

There are two problems here. First, Ed is clearly dissatisfied (though not because the job description wasn't accurate). Second, Carl hasn't been pleased with Ed's work lately.

There could be several solutions. (1) Leave things as they are. (2) Ed could improve his work on the spray crew, hoping that Carl will then let him work as an advisor. (3) Carl could begin training Ed as an advisor, hoping that his increased interest will improve his work. (4) Ed could take classes to improve his skills on his own. (5) Carl could fire Ed. Students may suggest other ways.
Principles to bring out in the discussion are: (1) Both the employee and employer must be satisfied if the business is to run smoothly; and (2) there are often ways to work out problems other than firing someone if both the employer and employee are willing to look for them.

Unit 5 - Organizing the Work (1 class period)

I. Case Study:

Carl schedules jobs for a number of farmers after Darcy determines what each needs. To keep track of each job and help in scheduling, Carl uses Darcy's Work Needed reports to prepare Work Orders and plan each day's jobs.

Text: Planning the Work
Doing the Work
Checking the Work

II. Responses to Individual Activities

1. WORK ORDER

FROM: Northwest Fertilizer and Pesticide Service
1600 County Rd.
Farmtown

JOB FOR: Flanagan Farm
Box 18, Route 6
Farmtown

DATE: July 7
WORK ORDER NUMBER: 00301
ORDER TAKEN BY: Carl
START WORK ON: July 12
TERMS OF PAYMENT: Credit

Person Doing Work Description of Work Materials Labor
Carl Squash - Mildew, 10 acres $60.00
Benlate, 1/2 lb. per acre $200.00
Phalton 500, 2 lbs. per acre 600.00

WORK STARTED: 9:15 a.m.
WORK FINISHED: 11:15 a.m.
BY: Carl

TOTAL MATERIALS $800.00
TOTAL LABOR 60.00
TAX 40.00
TOTAL COST $900.00
2. They help keep track of jobs, plan a work schedule, and keep track of time worked and what farmers owe.

3. One worker should do these jobs: Morning, Legget Farm; afternoon, Winslow Farm. The other worker should do these jobs: Morning, Irving Farm, Wong Farm; afternoon, Winslow Farm, Amos Farm.

Morning and afternoon jobs may be reversed for both, and the second worker's two jobs during each time period may be reversed.

4. Two possible answers are: (1) to be sure farmers are satisfied with the work, and (2) to try to get more jobs for the shop. Other reasonable answers are also acceptable.

III. Responses to Discussion Questions

1. He probably didn't do jobs promptly; he may have lost some slips of paper and may never have done some jobs at all; he may have undercharged or overcharged farmers. Students may have other answers.

2. All jobs may not be close to one another, or close ones may use different kinds of equipment. They could buy more equipment. Students may have other answers.

3. Selling can be anything that makes customers want to keep using the business for fertilizer and pesticide services. Keeping customers satisfied is one way, and finding out if they have other jobs to be done is another way.

IV. Group Activity

The purpose of this activity is to improve the students' knowledge of real business operations in your area. The purpose is not mastery of use of each form. It's merely an introduction to the importance of keeping good records of all kinds.

Note that financial records are addressed in Unit 8 of this module. Do not include financial records in this activity if possible.

Unit 6 - Setting Prices (1 class period)

I. Case Study:

Setting prices for a fertilizer and pesticide service involves understanding costs for materials and labor. Carl lists his expenses and considers the rates charged by established farm services and demand for his service.
Text: Materials
Labor

Optional Points to Present:

- If students have trouble understanding why supply costs are included in labor charges and costs for materials are not, explain the concepts further.

- In this module the owner's salary is defined as part of the profit. In fact, different business owners handle the payment of their own salaries in different ways. When starting the business, most owners do not list their salary as a regular expense. Later, when the business is more stable, the owner may begin to do so. This point does not have to be mentioned unless students raise it, or you wish to discuss it.

- Inventory management and depreciation of equipment are not covered in this module. Refer to Module 1, Getting Down to Business: What's It All About? to discuss these topics if you wish.

II. Responses to Individual Activities

1. Materials
   Fertilizers
   Pesticides

   (Both of these may be listed in detail.) Materials are charged directly to the customer, so they don't have to be paid out of labor charges.

2. Answers should fit your area. Small fertilizer and pesticide service rates may be less.

3. Owner's salary
   Taxes
   Expanding the business

4. Lowest
   Operating Expenses
   Profit needed or wanted

   Highest
   Demand
   Competition

   The right price lies in between these two.

5. Answers will vary.

III. Responses to Discussion Questions

1. If Carl charges more than established services, he will probably lose business. Right at first, at least, he should charge no more than the established services. If the established services charge $25 an hour, Carl would not be able to
match their price. He should find a different business—or a different location.

2. He can charge a "flat rate" for a job. This makes estimates easy. But if a job turns out to be especially difficult, the business could lose money.

IV. Group Activity

The purpose of this activity is to give students the opportunity to apply their learning. The activity requires them to evaluate how the factors they've studied will influence Joan's price-setting decisions.

The groups' responses may vary. This is fine as long as they can give reasons for their decisions. If necessary, guide students to glean this information from Joan's case study.

a. Cost of materials—This will not be a factor in Joan's setting prices at all, since her customers will be charged directly for materials.

b. Demand for services—Many customers in that location want fertilizer and pesticide services.

c. Competition—There are currently no fertilizer and pesticide services in the area.

d. Operating expenses—Office rent and insurance are higher than Joan planned. Also, Joan plans to pay higher salaries than other fertilizer and pesticide services.

e. Profit—Joan needs some profit so she'll have enough money (her own salary) to survive. Since she may not take a large salary herself, she is probably not aiming for a big profit at first.

Unit 7—Advertising and Selling (1 class period)

I. Case Study: Carl advertises his "Grand Opening" and chooses other forms of advertising.

Text: Advertising
Designing an Ad
Selling
Promotion

II. Responses to Individual Activities

1. Answers may vary. Look for good reasoning behind each decision. Probably the Yellow Pages ad is best, since it reaches the target audience more specifically.
2. Answers will vary.

3. Students' ads should be simple, truthful, and attractive and should tell the important things about Carter's Fertilizer and Pesticide Service. Headline, illustration, copy, and identification should be included and the ad should have a pleasing layout.

4. Answers will vary.

5. Answers will vary.

III. Responses to Discussion Questions

1. Answers will vary.

2. See if there are similarities among the good ads and among the bad ads. A bad ad can irritate customers and make them decide not to use your service. Radio ads are especially influential because customers can't just "turn the page."

3. Answers will vary. Make a list of the characteristics of good selling and bad selling.

IV. Group Activity

The purpose of this activity is to show students how many kinds of skills are joined together to get a business going successfully. Good advertising is important. If a business owner can't design a good ad (and very few can), he or she needs a good graphic artist. Students may also enjoy getting acquainted with another technical area, that of graphic designing and printing. If printing facilities are available, have the artist or printer show how they work and what the products look like.

Unit 8 - Keeping Financial Records (1 class period)

I. Case Study: Financial records are the basic records of any business. Tina uses three: the sales slip, the customer billing form, and the daily cash sheet.

Text: Types of Sales
Cash Sales
Credit Sales
Daily Cash Sheet

Optional Points to Present:

- Many small businesses use a bookkeeper or accountant to compile records for tax purposes. The financial records that the business keeps are the basic ones, those from which the bookkeeper or accountant works.
Some small business owners keep few records. Such businesses take a big risk if the Internal Revenue Service ever asks to see their books. Also, it's hard for such businesses to get a good idea of where they stand financially.

II. Responses to Individual Activities

1. (a) to know how much money is coming in and going out
   (b) to report taxes
   (c) to decide if you should expand your business or cut it back

---

**CUSTOMER BILLING FORM**

<table>
<thead>
<tr>
<th>Date</th>
<th>Description of Sale</th>
<th>Amount Charged</th>
<th>Payment Received</th>
<th>Balance Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 27</td>
<td>Fertilize pear orchard</td>
<td>$350</td>
<td></td>
<td>$350</td>
</tr>
<tr>
<td>May 25</td>
<td>Payment</td>
<td></td>
<td>$200</td>
<td>150</td>
</tr>
<tr>
<td>June 25</td>
<td>Payment</td>
<td></td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>July 2</td>
<td>Pest spraying, pear orchard</td>
<td>475</td>
<td></td>
<td>525</td>
</tr>
<tr>
<td>July 25</td>
<td>Payment</td>
<td></td>
<td>300</td>
<td>225</td>
</tr>
<tr>
<td>August 25</td>
<td>Payment</td>
<td></td>
<td></td>
<td>225</td>
</tr>
</tbody>
</table>

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**DAILY CASH SHEET**

<table>
<thead>
<tr>
<th>Cash Receipts</th>
<th>Cash Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Sales</td>
<td>Salaries</td>
</tr>
<tr>
<td>$180</td>
<td>$300</td>
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<tr>
<td>Credit Sales</td>
<td>Building Expenses</td>
</tr>
<tr>
<td>$120</td>
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</tr>
<tr>
<td></td>
<td>Equipment and Furniture</td>
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<tr>
<td></td>
<td>Fertilizer</td>
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<td>Advertising</td>
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<tr>
<td></td>
<td>Other</td>
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<td></td>
<td>$150</td>
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<td></td>
<td>$50</td>
</tr>
<tr>
<td>TOTAL CASH RECEIPTS $300</td>
<td>TOTAL CASH PAYMENTS $500</td>
</tr>
</tbody>
</table>
III. Responses to Discussion Questions

1. Not for just one day. It's what the business does over several months or a year, or even more, that matters.

2. First, the business can contact the customer and try to establish the terms of payment. If the customer still doesn't pay, the business can withdraw credit. Finally, the business can demand payment from the customer, have a lawyer or collection agency demand payment, or sue.

3. If records are completed every day, they are more likely to be complete and accurate. Records can be updated once a week if all business workers fill in work orders, etc., very carefully and file them carefully.

IV. Group Activity

The purpose of this activity is to acquaint students with the uses and importance of financial records. This presentation will highlight the significance of the material covered in this unit and also serve as an excellent introduction to the next unit.

Unit 9 Keeping Your Business Successful (1 class period)

I. Case Study: The business has been operating almost three years. Carl takes a look at its performance in each of those years and plans changes to make it more profitable.

Text: Profit and Loss Statement
Profit Ratio and Expense Ratio
Increasing Net Profits

Optional Points to Present:

- Some of the decisions business owners have to make are hard ones, such as laying off employees. But sometimes the survival of the business is at stake.

- In this unit, also, you may want to stress that there are many reasons to own a business; money may not be the most influential one.
II. Responses to Individual Activities

1. The correct responses are:

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Profit</td>
<td>$24,000</td>
<td>$36,000</td>
</tr>
<tr>
<td>Expense Ratio</td>
<td>56%</td>
<td>50%</td>
</tr>
<tr>
<td>Profit Ratio</td>
<td>12%</td>
<td>13%</td>
</tr>
</tbody>
</table>

2. Year 2

(a) Increase Revenues
   (a) Raise prices
   (b) Offer new services
   (c) Try to reach new customers
   (d) Charge for credit

(b) Reduce Expenses
   (a) Cut back employee hours
   (b) Sell new tractor spray rig
   (c) Buy cheaper ads or stop advertising
   (d) Move to a cheaper building

All of these changes increase net profit.

III. Responses to Discussion Questions

1. Pride of ownership, liking to be his own boss. Students may think of other answers.

2. He might have thought about expanding again: hiring more supervisors and spray crews, etc.

3. Continue efforts to increase net profits. He might have to lay off workers, sell the new spray rig, raise prices, etc.

4. Yes. Cheap materials can be cheaply made. If materials are unsatisfactory and results are poor, customers are likely to be unhappy. That may cost the business more than it saves.

IV. Group Activity

The purpose of this activity is to summarize the contents of the whole module. The specified units all have to do with planning the business but not operating it, and so can be carried out by students. Let students choose the groups they wish to work in as much as possible. If you think any of your speakers would be willing to act as resource persons for students, set up sessions they can attend.

The students can hand in a class paper or make a presentation. Some of the business teachers and students in your school might like to attend a presentation. Fertilizer and pesticide service owners might also be interested. This activity could be used as a means of developing interest in your students and perhaps finding work experience and job openings for some of them.
Summary (15–30 minutes)

If desired, the Quiz may be given prior to summarizing the module and doing wrap-up activities.

The Summary section of the Student Guide covers the main points of the module. You may wish to discuss this briefly in class to remind students of major module topics.

Remind students that their participation in this module was intended as an awareness activity so they could consider entrepreneurship as a career option. Their introduction to the skills required for successful small business management has been brief. They should not feel that they are now prepared to go out, obtain a loan, and begin their own business. More training and experience are necessary. You can suggest at least these ways of obtaining that experience: one way is to work in the business area in which they would eventually want to have their own venture; another is to go to school (community colleges are starting to offer AA degrees in entrepreneurship).

This is a good time to get feedback from the students as to how they would rate their experience with the module. Could they identify with the characters portrayed in the case studies? How do they feel about the learning activities?

You may want to use a wrap-up activity. If you have already given the quiz, you can go over the correct answers to reinforce learning. Or you could ask class members to talk about what they think about owning a small business and whether they will follow this option any further.

Quiz (30 minutes)

The quiz may be used as an assessment instrument or as an optional study tool for students. If you wish to use the quiz for study purposes, duplicate and distribute the answer key to students. In this case, student achievement may be assessed by evaluating the quality of students' participation in module activities.

Quiz Answer Key

1. Answers could include:
   a. training and skills in fertilizer and pesticide use
   b. training and skills in business management
   c. willingness to work hard
   d. ability to get along well with people
   e. wanting to be one's own boss
   f. being careful in situations in which people could be hurt

2. a
3. Answers could include:
   a. helicopter spraying
   b. integrated pest management advice
   c. free help in deciding what fertilizer and pesticide is needed
   d. discounts for large orders or quick payment
   e. guarantees that results will be good or the job will be done over

   Other reasonable answers are acceptable.

4. Answers could include:
   a. business operator's license
   b. choosing a legal form of business
   c. getting adequate insurance
   d. getting a pest control operator's license for each spray crew member
   e. getting a pest control advisor's license for each advisor
   f. getting a pest control dealer's license
   g. registering with the State Department of Agriculture

5. Answers could include:
   a. how many customers you would have
   b. how big the space is
   c. how the location will be noticed by customers
   d. how it's equipped, or how easy it is to equip
   e. the shape it's in
   f. how much it costs

   Other reasonable answers are also acceptable.

6. b

7. Answers could include:
   a. kind of service
   b. location
   c. competition
   d. customers
   e. plans for success

8. Total starting expenses
   Total money on hand
   Total loan money needed

9. b

10. c

11. Answers could include any training presented in the text or class discussion.
12. WORK ORDER

FROM: Henry's Fertilizer & Pesticide Service
2803 Canyon Highway
Felton

DATE: July 12th

WORK ORDER NUMBER: 00453

JOB FOR: Adams Farm
Route 30, Box 12
Felton

ORDER TAKEN BY: Ben

START WORK ON: July 15

TERMS OF PAYMENT: Cash

<table>
<thead>
<tr>
<th>Person Doing Work</th>
<th>Description of Work</th>
<th>Materials</th>
<th>Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Henry</td>
<td>Fertilize strawberry crop</td>
<td>Calcium nitrate, 17%</td>
<td>$400.00</td>
</tr>
<tr>
<td></td>
<td>40 acres</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WORK STARTED: July 15, 9 a.m.
WORK FINISHED: July 15, 1 p.m.
BY: Henry

TOTAL MATERIALS $400.00
TOTAL LABOR 120.00
TAX 20.00
TOTAL COST $540.00

13. One worker (either one):
   Lemon grove, 20 miles west
   Orange grove, 75 miles west

14. b

15. b

16. Answers could include:
   a. headline
   b. illustration
   c. copy
   d. layout
   e. identification

17. Other worker:
   Lemon grove, 35 miles south
   Lemon grove, 2 miles east
17. CUSTOMER BILLING FORM

Customer: Nakamura Farm

<table>
<thead>
<tr>
<th>Date</th>
<th>Description of Sale</th>
<th>Amount Charged</th>
<th>Payment Received</th>
<th>Balance Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 30</td>
<td>Fertilize spinach field</td>
<td>$100</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>May 15</td>
<td>Payment</td>
<td></td>
<td>$50</td>
<td>50</td>
</tr>
<tr>
<td>May 20</td>
<td>Spray spinach field for pests</td>
<td>$200</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>June 15</td>
<td>Payment</td>
<td></td>
<td>$50</td>
<td>200</td>
</tr>
<tr>
<td>July 14</td>
<td>Payment</td>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

18. DAILY CASH SHEET

<table>
<thead>
<tr>
<th>Cash Receipts</th>
<th>Cash Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Sales</td>
<td>Salaries $</td>
</tr>
<tr>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Credit Sales</td>
<td>Building Expenses $500</td>
</tr>
<tr>
<td>880</td>
<td>Equipment and Furniture</td>
</tr>
<tr>
<td></td>
<td>Pesticides $200</td>
</tr>
<tr>
<td></td>
<td>Advertising $40</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>TOTAL CASH RECEIPTS $860</td>
<td>TOTAL CASH PAYMENTS $740</td>
</tr>
</tbody>
</table>

19. Correct responses are:

Net Profit = $18,000
Expense Ratio = 38%
Profit Ratio = 12%

20. a

21. Answers could include:

a. change the location
b. offer free help in deciding what fertilizers and pesticides are needed

Other reasonable answers are acceptable.
**SUGGESTED READINGS**

*General Entrepreneurship References*


*Fertilizer and Pesticide Service Resources*

Porder, E. P. *Career preparation in agricultural supplies and services: A curriculum guide for high school vocational agriculture.* Columbus, OH: The Ohio State University, 1974.

Acknowledgment: Mr. Bob Needham, owner and manager, Pacific Pest Control, Oxnard CA.
GOALS AND OBJECTIVES

Goal 1: To help you plan a fertilizer and pesticide service.

Objective 1: List three or more personal qualities an owner of this business might have.

Objective 2: Describe the services, customers, and competition of this business.

Objective 3: List two ways to help your business "stand out" from its competition.

Objective 4: List two Legal requirements for running this business.

Goal 2: To help you choose a location for a fertilizer and pesticide service.

Objective 1: List three things to think about in deciding where to locate this business.

Objective 2: Pick the best location for this business from three choices and explain your choice.

Goal 3: To help you plan how to get money to start a fertilizer and pesticide service.

Objective 1: Write a business description for this business.

Objective 2: Fill out a form showing how much money you need to start this business.

Goal 4: To help you learn how to plan work for the employees of a fertilizer and pesticide service.

Objective 1: Decide how to divide the work of the business among the workers.

Objective 2: Pick the best person to hire for a job in this business.

Objective 3: Describe one kind of training you might give your employees.
Goal 5: To help you learn how to keep track of the work of a fertilizer and pesticide service.

Objective 1: On a work order form, show how to write a job order for a customer.

Objective 2: Write a one-day work schedule for workers in this business.

Goal 6: To help you decide how to set prices for a fertilizer and pesticide service.

Objective 1: Pick the best price for one of the services of this business.

Goal 7: To help you learn ways to advertise and sell the services of a fertilizer and pesticide service.

Objective 1: Pick one way to advertise this business.

Objective 2: Design a printed ad for this business.

Goal 8: To help you learn how to keep financial records for a fertilizer and pesticide service.

Objective 1: Fill out a customer account form for a customer.

Objective 2: Fill out a daily cash sheet for money received and paid out in one day.

Goal 9: To help you learn how to keep a fertilizer and pesticide service successful.

Objective 1: Figure out the net profit, profit ratio, and expense ratio for this business.

Objective 2: State one way this business could increase its profits.

Objective 3: State one way this business could change its services to increase sales.