Agri-Entrepreneurship Program

Unit: 4

Lesson: 4.1

Where do I Start? What Should I know?

Precepts:

P. Technical/Function Skills in Agriculture
N. Decision making
 N2. Demonstrate problem solving skills
C. Vision
 C2. Conceptualize ideas
J. Mental Growth
 J1. Think critically
 J4. Solve problems

National Standards:

NSS-EC.9-12.11 Money
NSS-EC.9-12.14 Entrepreneurs

Student Learning Objectives:

As a result of this lesson, the student will …

1. Define the necessary terms to create financial documents related to their enterprise.
2. Identify the key steps to beginning the entrepreneurial process.

Instruction time for this lesson: 60 minutes

Resources:

- National FFA Organization. *Essential Learnings* materials.

2003

- *Elliott, Jack. AgriBusiness Decisions and Dollars*. 1999
- Zimmerer, Thomas, and Scarborough, Norman. *Entrepreneurship and New Venture Formation*. 1996.
- Birley, Sue and Muzyka, Dan. *Mastering Entrepreneurship*. 2000.

Tools, Equipment, and Supplies:

- Writing Surface
- Writing utensil
- Copies of AS.1 for each student
- Copies of AS.2 for each student
- Copies of the evaluation for each student if utilized
- Overhead and/or projector

Key Terms:

The following terms are presented in this lesson and appear in bold italics:

Breakeven Point
Economics of One Unit (EOU)
Variable Costs
Fixed Costs
Cost of Goods Sold (COGS)
Contribution Margin
Depreciation
Inflation
Net Profit
Breakeven Point
Economics of One Unit (EOU)
Variable Costs
Fixed Costs
Cost of Goods Sold (COGS)
Contribution Margin
Depreciation
Inflation
Net Profit

Interest Approach:

As students enter the room, write the following statement on the board, "On the first day of school as a freshman, I was thinking ____________, and feeling ______________." Ask students to respond quietly on a sheet of paper or in their journals/notebooks.

Good morning! Before we begin today, let's take a look back at the first day of school your freshman year. Quietly record what thoughts were going through your mind on that first day. What were you thinking and feeling? Take the next few moments to think and record your thoughts in your notebooks. Be ready to share when called on.

Give students an appropriate level of time to record their thoughts, *and begin a discussion allowing students to share. If students are reluctant, the instructor may begin the discussion—for example, many teachers are nervous/excited on the first day.*

Those are some great thoughts! Thanks for sharing with each other. Think for a moment about what you needed to know the first day of school. What things did you absolutely need to know? For example, you obviously needed to know where your classes were. What other things were necessary?

Allow students to share, and then connect discussion to what they need to know about the financial planning of an entrepreneurship.

Great examples. Now imagine that it is 15 years from now, and you are opening your own business. You have a product or service set up, employees, and a way to gain customers…but what would you need to know before you actually open your business?

As we move forward in your entrepreneurial planning, realize that there are definite things that we need to know before we begin creating our financial plans. Some of the same feelings that we discussed about the first day of school can surface when thinking about "Where do I even start with my enterprise?" By now you have some great ideas, but it can be overwhelming. However, try and start organizing your thoughts and finances. Raise your hand if you are feeling a little freaked out about the financial planning of your new business.

Potential opportunity for students to share thoughts about the planning process.

Well, I have some good news. Last time we investigated marketing our products and we are all aware of the importance of finances to entrepreneurs. Today we should become very familiar with some key terms necessary to start creating financial plans or a budget. Some of you may even have the opportunity to present your financial documents to a banking expert…would they be willing to support your plan with a loan? Let's dive in and see where that entrepreneurial spirit takes us!

Objective 1: **Identify the key steps to beginning the entrepreneurial process.**

In the morning, how many of you put both of your socks on and then both of your shoes on? How many of you put a sock and then shoe on, then do the same with the other foot? How many do it differently each time?

Allow students to respond by show of hands.

Graphic Artist e-Moment

The Graphic Artist e-Moment challenges students to visually represent the meaning of a vocabulary word using the word's shape and related symbols. This activity helps students to visually remember each term.

We have some similarities in that we all pretty much start with the socks, then follow with our shoes. Can you imagine putting your socks on over your shoes? When we start organizing our finances for our enterprise, there are also key steps that need to be taken, but there are a variety of ways to complete them.

Let's start by looking at terms we need to identify before we go any further. Here are some handouts with definitions that are important to starting our financial planning along with a blank piece of paper. With the piece of paper, please fold it in thirds and then in thirds again, creating nine boxes on each side. As we discuss each term, write the term to visually represent the meaning of the word on your blank paper that has been divided into 18 boxes, front and back. Use the word's shape and related symbols to represent what each term means.

Write s-----l-----o-----w on a public writing surface.

A general example would be the word slow. To depict this word you might write s-----l------o--------w. For example, we will discuss the term ***variable costs.*** You may wish to draw variable with both upper and lower case letters i.e. ***VaRiAbLe Cot.*** Be creative; your drawings are to help you remember each term! Some will be more of a challenge then others, but just do your best and be ready to share what you have created. If you struggle with a term for ideas, skip it and move on. What can I clarify?

Distribute AS.1 and have brief discussion to clarify each term. Ask students to draw a visual representation of each term as you explain them. For example, for breakeven, students might write the word broken right in the middle with the parts of the "K" written separate from each other. Present examples of each throughout the discussion to clarify examples for students.

Technical Content (Identical to AS.1)

Breakeven Point*:** When enough items/units are sold to cover your ***fixed costs.
Equation for ***Breakeven Point*** Fixed Cost/Gross Profit per Unit = ***Breakeven Point***
For example, we may need to sell at least 1,000 DVDs to pay our rent.

***Economics of One Unit (EOU)*:** The amount of gross profit earned on each unit of your product. For example, if you sell DVD's, and you make $15 gross profit on each DVD sold, $15 is your EOU.

***Variable Costs*:** Costs associated with producing product including cost of materials, labor, and shipping and handling. For example using a DVD, the blank DVD may cost $3.00, the labor to create the finished disk may be $4.00, the shipping to the store(s) for sale $1.00, so the variable cost per unit would be $8.00. This may go up or down depending on the number of units sold.

***Fixed Costs*:** Constant costs that stay the same, no matter how many items you sell, include rent on building, equipment, etc. Your rent will be the same, no matter if you sell 1 or 1,000 DVDs.

Cost of Goods Sold (COGS)*:** The cost to produce the unit including shipping, labor, and cost or materials (variable costs***). For each DVD, how much is our COST?

Contribution Margin*:** Selling price of a unit minus the total ***variable costs. Example, DVD sold for $20.00, minus the EOU of $15, equals a ***contribution margin*** of $5.00

***Depreciation*:** Used to help offset the cost of large items like equipment over time. A percentage of the value of an item is subtracted every year until the value of the item is zero. It helps to financially justify wear and tear on item. If we purchase a DVD label maker for $10,000, we can expense it over several years so we don't show a huge financial hit the first year.

***Inflation*:** Gradual increase in the cost/price of items and services. Our blank DVDs, like many of the materials we use in our factory, will likely cost more five years from now than they do now.

Net Profit: Profit or loss after all of a business or enterprise's costs are subtracted; the bottom line. For example, if we sell $100,000 worth of DVDs and we have $20,000 in expenses, our net profit is $80,000…wow, not bad!

Start-Up Investment: The original costs necessary to get a business operating (original investment for items like DVD maker, computers, equipment, raw materials, etc.)

***Payback*:** How long it takes to make enough money to offset start-up investment.
Formula is start-up investment/net profit per month = ***payback***
So if we spent $10,000 to start our business, and we make $1,000 net profit per month, then our payback is 10 months.

***Income Statements*:** Summary of income and expenses over a specific time, showing net profit or loss. We will be creating one of these! This is kind of like the income statement page in the record book.

Cash Flow Statements**:** Cash ***receipts*** minus cash disbursements over time—usually shown in journal or ledger. This would look similar to the journal in your record book.

Balance Sheets**:** Summary of assets, liabilities, and net worth. This will help us see what we have, what we owe, and how all of these numbers relate. For example, we may have $10,000 in equipment, $15,000 in the bank, and owe $50,000 for our startup costs.

Receipts: A paper with items purchased, date, location, and cost on it. You would need one of these to take something back, we use them here to help show what we purchased, when, and how much it cost.

Invoices: Summary of items sold or delivered and amount due; basically a bill. When we sell some of our DVDs to a store, we would send them a bill or invoice so they could pay us. On the invoice we would note what we sold, the costs, and date.

Inventory: Items on hand to be sold, and/or assets, supplies, capital, and depreciable and non-depreciable assets. We always need to know what we have. If a customer places an order for $1,000 worth of DVDs, we would need to know if we have that many, and if not how many more we would need to order—we also don't want to have too many extra.

Thanks for being such eager learners! As you can see, there are definitely some important terms to know before we can begin our financial planning. Let's make sure that we have some tools to help us remember and recognize them as we move forward.

Objective 2: **Identify the key steps to beginning the entrepreneurial process.**

In objective 2, the teacher presents students with basic information in AS.2 and then engages them in an e-Moment.

Next, let's take a look back at the beginning of the lesson and that first day of school. Just like we needed a class schedule, class materials, and a backpack to be successful the first day, we now have the tools we need to dive into the financial process. We are ready! Turn to the person sitting next to you and say "Yes, I'm ready!"

Great! So over the last few days, we have been developing ideas for our entrepreneurial venture. We have some tools under our belt such as marketing ideas, a set of objectives and goals, and we have defined some financial terms. So where do we get the money to start our business? Where do we even begin? Let's explore this concept. When you receive this activity sheet, please follow along diligently because we will use the information in an activity following a brief description of each concept.

Distribute AS.2 and describe each concept briefly, answering and asking questions as needed.

How will you fund the business? How much will you need? (Identical to AS.2)

Funding Request—Determine how much money you will need, and clearly state how you will spend this money. Remember to ask for plenty. In addition to your start-up costs, you should include enough in your request to cover the first few months of bills in your company.

Financial Statements—Include the latest cash flow and ***balance sheets*** from your company if it is already operating. If not operating, include trends and estimated ***inflation*** on projections.

Forecasts—Use your research information, market data, and anticipated costs to build a scenario for the next 2-3 years or your business.

We definitely have the tools and vocabulary to begin our financial planning now, but where do we go to get the money we need to start? Where would you go and who would you talk to?

Allow some responses.

Great ideas! Here are some things to think about, as there are many sources of funding for starting your business. Let's capture these in our notes!

Credit--Obtaining a loan from a bank or farm credit organization to fund the business start-up

Investors (venture capitalists)--Financial backers to fund the business start-up

Stocks and Bonds--Reserved for corporations. Shares of company are sold in the case of stocks—bonds are documents that mature over time, so eventually the company would pay back the money borrowed plus a guaranteed interest.

Personal Funding/Family--Some entrepreneurs seek funding from family and friends. Though this is sometimes necessary, it is important to remember that generally this capital is paid back with a fair interest rate and at terms acceptable to both sides. Never jeopardize relationships for money. When using personal funds, make sure to set realistic goals and don't risk so much that you could "loose it all."

<u>Me-You-Us e-Moment</u>

The Me-You-Us Moment empowers students to contribute their ideas. This strategy creates the time students need to thoughtfully consider the information presented and personally access their own thinking.

At this point in the lesson, ask students to discuss other pros and cons of these funding types.

Now that we have looked at several funding resources, think about what type would be best for you in your situation. Record a few sentences in your notebook about what you would choose and why. Be ready to share.

Allow time for student work.

Take one minute to share your response with a partner.

Allow time for sharing, and then ask the groups/partners to share with the rest of the class. It may be beneficial to take a poll of the desired funding source. Depending on time, the following could be assigned as homework/enrichment (as written) or completed in class if time permits or on the next day. This would be ideal if more guided practice is necessary. For more advanced students, homework will expedite the process more efficiently.

Great discussion! So we have tools, and now we have some ideas for how we are going to fund our new enterprise. No matter what type of funding we each choose, we will need to put together some documents to "SHOW THEM THE MONEY" or at least how we will make it and where we will spend theirs. Tomorrow we will be looking at creating ***cash flow statements***. These will be forecasts into the future for many of us, so as an enrichment activity tonight, use the terms we discussed earlier as a guide and try to determine ALL of your enterprises anticipated costs. Figure out your own EOU, COGS, anticipated variable and ***fixed costs***, a price for your product, ***contribution margin***, and finally what you would need/ask for a start up investment. Be sure to take your notes with you and do your research to come up with good estimates. What can I clarify about the home assignment?

Answer questions as necessary.

Review/ Summary:

Use an Eyewitness News e-Moment. *Capturing the news as it breaks helps your students review what they learn. Students who talk about what they learn and do what they learn, learn it. This activity maximizes student conversation about the content.*

Place students into groups of three and have them interview each other as experts in the area of entrepreneurship financing. Students should create a list of three to five questions before being placed into *groups. Students will rotate between being expert, reporter, and cameraman.*

Thank you all for working so hard today. You are all well prepared to kick off your financial planning tomorrow! To make sure we solidify this information, think about three good questions you would ask one of your peers about a concept we learned today. For example, what is net profit? Take one minute to come up with three questions. Go!

Allow for thinking.

We are now going to try these questions out. You will either be a reporter asking three questions, an expert answering questions, or a cameraperson recording what takes place in the interview. Find two other partners when I say, "Move," and choose a role, cameraperson, expert or reporter. Rotate roles when I say. "Rotate." MOVE!

Say rotate as time permits and groups finish. When finished, ask students to quickly return to their desks.

Nice work today. I am excited to see what you all come up with tonight. Don't forget to bring your work back with you tomorrow so we can start on your cash flow sheets and get you the money you need to get started. Who will describe the class' homework this evening?

Application:

- Extended classroom activity:
  1. *Give students samples of cash flow sheets to review for the following day. Have them record any questions or mark any highlights they would like to discuss the next day.*
  2. *Use the $10,000 Pyramid e-Moment to review each term. Students create cards and get into groups to review.*

- FFA activity:
  1. *Have students review your chapter's FFA budget and discuss what they have learned in the lesson and how it would apply to the FFA budget.*
  2. *Set up a marketing plan team.*

- SAE activity:
  Have students follow the same work completed in class and evaluate one of their SAE projects (not the one they might use for this entrepreneurship project). Have them highlight how the terms affect their SAE records.

Evaluation:
ASSES 4.1

Match the term to the correct definition.

1. ___Forecasts
2. ___Financial Statements
3. ___Funding Request
4. ___Inventory
5. ___Invoices
6. ___Receipts
7. ___Balance Sheets
8. ___Cash Flow Statements
9. ___Income Statements
10. ___Payback
11. ___Start-up Investment
12. ___Net Profit
13. ___Inflation
14. ___Depreciation
15. ___Contribution Margin
16. ___Cost of Goods Sold
17. ___Fixed Costs
18. ___Variable Costs
19. ___Economics of One Unit
20. ___Breakeven Point

A. Selling price of one unit minus the total variable costs.
B. When enough items/units are sold to cover fixed costs
C. The amount each item costs to produce including labor, shipping, and cost of materials.
D. Constant costs that stay the same, no matter how many items sold, including rent, equipment, etc.
E. Total costs associated with producing your product
F. The amount of gross profit earned on each unit of product.
G. Items on hand to be sold, supplies, assets, etc.
H. Summary of items sold, a bill.
I. Summary of assets, liabilities, and net worth
J. Paper with items purchased, date, location and cost on it
K. Cash receipts minus cash disbursements over time, usually shown in a journal or ledger
L. Used to offset the cost of large items like equipment over time
M. Gradual increase in the cost/price of items and services
N. Profit or loss after all of a business or enterprise's costs are subtracted, the bottom line
O. The original costs necessary to get a business going.
P. How long it takes to make enough money to offset the start up investment
Q. Summary of income and expenses over time, showing net profit or loss.
R. Estimated financial scenario taking into account market data, research and anticipated costs.
S. Data that shows financial information for company, including cash flows, balanced sheets and trends.
T. Amount of money requested to start business, usually includes first few months of operating expenses.

21. List four examples of funding sources and give brief examples of each:

____

Answers to Evaluation:

1. r
2. s
3. t
4. g
5. h
6. j
7. i
8. k
9. q
10. p
11. o
12. n
13. m
14. l
15. a
16. c
17. d
18. e
19. f
20. b

21. **Credit--**Obtaining a loan from a bank or farm credit organization to fund the business start-up.

    Investors (venture capitalists)--Financial backers to fund the business start-up

    Stocks and Bonds--Reserved for corporations. Shares of company are sold in the case of stocks—bonds are documents that mature over time, so eventually the company would pay back the money borrowed plus a guaranteed interest.

    Personal Funding/Family--Some entrepreneurs seek funding from family and friends. Though this is sometimes necessary, it is important to remember that generally this capital is paid back with a fair interest rate and at terms acceptable to both sides. Never jeopardize relationships for money.

AS.1

Financial Planning Terms

Breakeven Point**:** When enough items/units are sold to cover your ***fixed costs***.
Equation for ***Breakeven Point*** Fixed Cost/Gross Profit per Unit = ***Breakeven Point***
For example, we may need to sell at least 1,000 DVDs to pay for our rent.

Economics of One Unit (EOU)**:** The amount of gross profit earned on each unit of your product. For example, if you sell DVD's, and you make $15 gross profit on each DVD sold, $15 is your EOU.

Variable Costs**:** Costs associated with producing product including cost of materials, labor, and shipping and handling. For example using a DVD, the blank DVD may cost $3.00, the labor to create the finished disk may be $4.00, the shipping to the store(s) for sale $1.00, so the variable cost per unit would be $8.00. These may go up or down depending on how many units you sell.

Fixed Costs**:** Constant costs that stay the same, no matter how many items you sell, including rent on building, equipment, etc. Your rent will be the same, no matter if you sell 1 or 1,000 DVDs.

Cost of Goods Sold (COGS)**:** The cost to produce the unit of product including shipping, labor, and cost or materials (***variable costs***). For each DVD, how much is our COST?

Contribution Margin**:** Selling price of a unit minus the total ***variable costs***. Example, DVD sold for $20.00, minus the EOU of $15, equals a ***contribution margin*** of $5.00

Depreciation**:** Used to help offset the cost of large items like equipment over time. A percentage of the value of an item is subtracted every year until the value of the item is zero. Helps to financially justify wear and tear on item. If we purchase a DVD label maker for $10,000, we can expense it over several years so we don't show a huge financial hit the first year.

Inflation**:** Gradual increase in the cost/price of items and services. Our blank DVDs, like many of the materials we use in our factory, will likely cost more five years from now then the do now

Net Profit: Profit or loss after all of a business or enterprise's costs are subtracted; the bottom line. For example, if we sell $100,000 worth of DVDs and we have $20,000 in expenses, our net profit is $80,000…wow, not bad!

Start-Up Investment**:** The original costs necessary to get a business going, (original investment of items like DVD maker, computers, equipment, raw materials, etc.)

Payback**:** How long it takes to make enough money to cover ***start-up investment***.
Formula is start-up investment/net profit per month = ***payback***

So if we spent $10,000 to start our business, and we make $1,000 net profit per month, then our payback is 10 months.

Income Statements**:** Summary of income and expenses over a specific time, showing net profit or loss. We will be creating one of these! This is kind of like the income statement page in the record book.

Cash Flow Statements**:** Cash ***receipts*** minus cash disbursements over time—usually shown in journal or ledger. This would look similar to the journal in your record book.

Balance Sheets**:** Summary of assets, liabilities, and net worth. This will help us see what we have, what we owe, and how all of these numbers relate. For example, we may have $10,000 in equipment, $15,000 in the bank, and owe $50,000 for our startup costs.

Receipts**:** Paper with items purchased, date, location, and cost on it. You would need one of these to take something back; we use them here to help show what we purchased, when, and how much it cost.

Invoices**:** Summary of items sold or delivered and amount due; basically a bill. When we sell some of our DVDs to a store, we would send them a bill or invoice so they could pay us. On the invoice we would note what we sold, the costs, and date.

Inventory**:** Items on hand to be sold, and/or assets, supplies, capital, and depreciable and non-depreciable assets. We always need to know what we have. If a customer places an order for $1,000 worth of DVDs, we would need to know if we have that many, and if not how many more we would need to order—we also don't want to have too many extra.

AS.2

What Do We Need to Get Funding?

Funding Request—Determine how much money you will need, and clearly state how you will spend this money. Remember to ask for plenty, in addition to your start-up costs, you should include enough in your request to cover the first few months of bills in your company.

Financial Statements—Include the latest cash flow and ***balance sheets*** from your company if it is already operating. If not operating, include trends and estimated ***inflation*** on projections.

Forecasts—Use your research information, market data, and anticipated costs to build a scenario for the next 2-3 years or your business.

Where Does the Money Come From?

Credit--Obtaining a loan from a bank or farm credit organization to fund the business start-up

Investors (venture capitalists)--Fnancial backers to fund the business start-up

Stocks and Bonds--Reserved for corporations. Shares of company are sold in the case of stocks—bonds are documents that mature over time, so eventually the company would pay back the money borrowed plus a guaranteed interest.

Personal Funding/Family--Some entrepreneurs seek funding from family and friends. Though this is sometimes necessary, it is important to remember that generally this capital is paid back with a fair interest rate and at terms acceptable to both sides. Never jeopardize relationships for money. When using personal funds, make sure to set realistic goals and don't risk so much that you could "loose it all."