Agri-Entrepreneurship Program

Unit: 4

Lesson: 4.3

Balance Sheet

Precepts:

C. Vision
- C1. Contemplate the future

J. Mental Growth
- J1. Think critically
- J3. Practice sound decision making

N. Decision Making
- N1. Demonstrate the decision making process

P. Technical/Function Skills in Agriculture

National Standards:

NSS-EC.9-12.13 Income and earning
NM-NUM.9-12.3 Compute fluently and make reasonable estimates

Student Learning Objectives:

As a result of this lesson, the student will…

1. Review an accurate balance sheet for a given entrepreneurship.
2. Analyze a balance sheet to determine a business' financial health.
3. Create an appropriate balance sheet for an entrepreneurship.

Instruction time for this lesson: 60 minutes

Resources:

- National FFA Organization. *Essential Learnings*. 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
- TM.1 (Electronic version for projection or one transparency copy)
- Copies or AS.1 for each student
- Overhead and/or projector

Key Terms:

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

Interest Approach:

The following interest approach works best if lessons are taught in sequence 4.1 through 4.3. The introduction includes a review of the previous lesson with a connection to today's budget lesson.

Today is an exciting day! We are extremely close to everything we will need to get our new businesses off the ground. Yesterday, we left with a completed cash flow statement. Let's use this analogy to get a better perspective as to where we are on our journey to a successful business. Imagine we are building a car. We have the frame and the body. We have narrowed down what our car might look like when it is completed, though we haven't yet applied a good coat of paint. Yesterday, we installed an engine; let's say the engine was our cash flow sheets. They will really provide the power we need to set up our business and get funding lined up. Today, we will install a great transmission into our car. What does the transmission do for the car?

Allow student responses. Lead discussion that the transmission serves as a way to maximize the power from the engine to produce a desired speed or amount of power/torque.

Great! So as we can see, without a transmission, our cars would only travel at one speed efficiently, like a bike with no gears vs. a bike with speeds. Which would you want ride up a hill?
So, today we will install the "transmission" for our financial plan. We will install our "***balance sheet***." Essentially, a ***balance sheet*** is a statement that shows all assets, liabilities, and net worth of a business. We can use this information as a tool to see how healthy a business is.

Objective 1: **Review an accurate budget for a given entrepreneurship.**

Obviously, similar to installing a transmission, there is a technique to building our ***balance sheet***. Not all ***balance sheets*** are created equal. Your ***balance sheet*** will be specific to your enterprise, just like a transmission in a tractor-trailer is different than one in a Geo Metro! Let's take a look at an example of a ***balance sheet***.

Use the italicized examples on the ***balance sheet*** *(TM.1) to explain each number. Provide a discussion about each type of* ***balance sheet****.*

Let's start by noting that there are a few types of ***balance sheets***. There are monthly ***balance sheets*** showing a financial summary from the start to the end of the month. "Wow we made $4,000 this month" or "I can't believe we lost that much in only a month," would be some things we might hear after reading a monthly ***balance sheet***. There is also a point-in-time ***balance sheet*** that simply shows what the financial health of a given business is at a given point in time. Today, we will be looking at a yearly ***balance sheet***. We will estimate what we plan to make (doing our best at forecasting) over a year of our business. Now, let's have a closer look at a yearly balance sheet and conduct an analysis.

Objective 2: **Students will analyze a *balance sheet* to determine a business's financial health.**

<u>Descartes Moment</u>

Use the Descartes e-Moment to solicit questions and facts before moving on to analyzing the ***balance sheet****. The Descartes Moment poses three questions prior to introducing a new concept, idea, or process: What do you know about this topic? What do you think you know? What don't you know? Students respond in writing and then share. The Descartes e-Moment works from this principle--accessing prior knowledge and experience allows students to build bridges into the new content.*

This example probably leads us to a few questions. Creating a ***balance sheet*** when you have not started your business yet requires some thought. What do you project? What do you forecast? Let's take stock of what we know so far and what we might glean from the ***balance sheet*** we just viewed.

In a moment we will have the opportunity to write three questions on a sheet of paper. After writing each question, please pause and wait for further direction. You will have one minute to write the questions down. Here they are--"What do I know about this company from looking at the ***balance sheet***?" "What do I think I know?" and "What don't I know?"

Allow time for writing the questions.

Great. When I say, "B***alance*** sheet," take three minutes to answer these questions on your paper using the best of your knowledge. Remember, the first question is what you know, the second is what you think you know, and lastly, what you don't know by analyzing the ***balance sheet***. What can I clarify? Balance sheet!

Allow time for students to write. Then allow time to share a few responses.

Those are some great facts and questions. Let's look at the ***balance sheet*** again to clarify a few points.

- The company has less cash on hand after a year, probably due to purchasing more equipment.
- The company has $1,000 more inventory after a year (why might this be?).

Maybe selling more, so the company needs more raw materials, or sales may be declining due to seasonal or sales trends, leading to less materials being made into DVDs.

- The company has more capital equipment (is this a good or bad thing?)

Company could be upgrading to increase efficiency and ability to sell more, so this would be positive.

- Why might the company have had no short-term liabilities at the beginning of the year, and $2,500 at the end?

It could be the first year, so at the beginning there was no short term debt yet, or it could be that the company is using more short term credit after a year, which could be a bad thing.

- Is it good that the long-term liabilities went from $5,000 to $4,000?

Yes, this means that payments are being made on the loan and that the balance is lower, compare this to the fact that there is more inventory and equipment and things look positive.

- Would you say this business is getting by, loosing money, or making good money? Why?

Allow students to discuss this idea. While there is no absolute way to know with just a ***balance sheet****, make the point that similarly, a* *car cannot run on just a transmission. This is why we need both financial statements. It appears from just this list, that the company is doing ok, but not super good or super bad.*

Good discussion. As you can see, a ***balance sheet*** doesn't have enough information to make an accurate assessment of a company's finances. We can get an idea, but going back to the car idea from the beginning of the lesson, the ***balance sheet*** represents the transmission; we still need the engine (cash flow sheet) and frame, body and paint (marketing) to have a complete, useful automobile.

Objective 3: **Create an appropriate balance sheet for an entrepreneurship.**

Distribute AS.1.

We have a pretty good set of tools to create our own ***balance sheets***. Remember, we will need to do some forecasting, since our entrepreneurial ventures are not in operation yet.

You have received a copy of a blank ***balance sheet***. When I say, "Go," do your best to estimate what will happen over the first year of your business. Be realistic and try to use all that you know about your industry to forecast what will happen. During this time, use the worksheet to create your own ***balance sheet***. Use a pencil as it will work best just in case you need to make changes. Be prepared to share your ***balance sheet*** with the rest of the class. What questions are there? Go!

Circulate around the room to assist students as necessary. After most of the students have completed their ***balance sheets****, allow time for a few students to share their* ***balance sheets*** *with the class, giving others ideas. Students should finish and improve their* ***balance sheets*** *for homework based on feedback on the students who presented to the class.*

Who will share their ***balance sheet*** with the class?

Allow several students to share.

Let's capture a few notes from our discussion about each student's ***balance sheet***.

Discuss tips from the presentations and encourage students to make the necessary changes to their own ***balance sheets****.*

Let's thank all of the students who shared for our benefit today.

Review/ Summary:

<u>Show What You Know e-Moment</u>

Using this engaging moment, students show what they know in a brief mini-quiz during a lesson. "During" is the key component. It's in this moment of learning that students demonstrate their level of understanding. This is not about mastery, but about clarifying their emerging understanding.

Thanks for all the effort you all put in today on your business. Let's take a moment to see how well we mastered our finances today. Please turn your handout over. When I say, "Go," silently, and without looking at any of your notes, try to create a ***balance sheet*** for a fast food restaurant. Do your best to remember all of the parts of a ***balance sheet*** and make sure your math is accurate. What can I clarify? Go!

Allow a few minutes for students to create their ***balance sheets****. Then allow them to look at their notes to see if they have all of the necessary parts, or students may share with a partner and have them help grade it using their notes.*

Great discussion. Thanks for all of your work today. We have taken a long journey and have some great financial documents to show for it. We have mastered one of the most difficult, yet important aspects of our new business.

Application:

- **Extended classroom activity:**
  Have students make changes improvements to their ***balance sheets*** using the suggestions from the class presentations. Students could also put their ***balance sheets*** in Excel or Word. Students could also ask a local agricultural business for a copy of a ***balance sheet***, analyze it, and turn in a brief report.

- **FFA activity:**
  Create a ***balance sheet*** for one of your FFA activities or fundraisers to show a real life example.

- **SAE activity:**
  Students create/update a ***balance sheet*** for their Entrepreneurship SAE project and share it with the class for analysis.

Evaluation:

Use the rubric below to evaluate students' ***balance sheet*** statements. Make any necessary comments and pass the worksheets back to students for revisions.

Rubric

CATEGORY	**0-1 Point (below basic)**	**2 points (basic)**	**3 points (Good)**
Assets	Asset list incomplete or numerous mathematical errors.	Asset list not reasonable or includes mathematical errors.	Complete asset list free from mathematical errors. List reasonable for given entrepreneurship.
Liabilities	Liabilities list incomplete or numerous mathematical errors.	Liabilities list not reasonable or includes mathematical errors.	Complete liabilities list free from mathematical errors. List reasonable for given entrepreneurship.
Owners Equity	Math is incorrect.	N/A	Math is accurate.
Total Assets	Math is incorrect.	N/A	Math is accurate.

TM.1

Before We Begin…

There are monthly ***balance sheets***, showing a financial summary from the start to the end of the month. "Wow we made $4,000 this month" or "I can't believe we lost that much in only a month," would be some things we might hear after reading a monthly ***balance sheet***.

There is also a point-in-time ***balance sheet*** that simply shows what the financial health of a given business is at a given point in time.

A yearly ***balance sheet*** has a summary of finances over a period of a year.

Sample Balance Sheet (one year of time)

Agri-Know DVD Company	**Dec. 31, 2006**	**Dec. 31, 2005**
Assets		
Cash *(what the company has in the bank)*:	$10,000	$12,000
Inventory: *(Blank DVDs, labels)*	5,000	4,000
Capital Equipment: *(DVD burner, computer, etc)*	12,000	10,000
Other Assets: *(anything else)*	-----	-----
Total Assets: *(add all lines)*	**$27,000**	**$26,000**
Liabilities		
Short Term Liabilities: *(lines of credit, bills)*	2,500	0
Long Term Liabilities: *(loans, money owed)*	4,000	5,000
Owner's Equity: *(total assets - liabilities)*	**$20,500**	**$21,000**
Total Liabilities + Owners Equity: ***(Total Assets)***	**$27,000**	**$26,000**

Some things to think about:

Creating a ***balance sheet*** when you have not started your business yet requires some thought. What do you project? What do you forecast? Let's look at the sheet above to highlight a few points.

- The company has less cash on hand after a year, probably due to more equipment
- The company has $1,000 more inventory after a year (why might this be?)
- The company has more capital equipment (is this a good or bad thing?)
- Why might the company have had no short-term liabilities at the beginning of the year, and $2,500 at the end?
- Is it good that the long-term liabilities went from $5,000 to $4,000?
- Would you say this business is getting by, loosing money, or making good money? Why?

AS.1

Name of your company here: ________________________

<u>Balance Sheet (one year of time)</u>

Agri-Know DVD Company	**Dec. 31, 2007**	**Dec. 31, 2006**
Assets		
Cash	$__________	$__________
Inventory:	___________	___________
Capital Equipment:	___________	___________
Other Assets:	___________	___________
Total Assets:	**$__________**	**$__________**
Liabilities		
Short Term Liabilities:	___________	___________
Long Term Liabilities:	___________	___________
Owner's Equity:	**$__________**	**$__________**
Total Liabilities + Owners Equity:	**$___________**	**$___________**

1. How did you forecast your numbers?

2. What was most difficult to forecast?

3. What have you learned about your numbers?

4. What would help you create your balance sheet more efficiently?