

Thoughts on teaching adult learners

As a new DGA Master Dairy Grazier, you may or may not have full-time employees on your farm and you likely have not had an employee whose primary motivation is learning how to run a dairy farm. Although a lot of what your Apprentice does on your farm is simply work, the goal in everything they do is for them to learn as much as they can from you, their mentor. Understanding how adults learn is the foundation of being a good teacher and mentor.

Principles of Adult Learning

When we hire our first Apprentice, we have a good idea what we want them to learn--what we need them to learn to be useful on our farm, but what do they want to learn? Unlike children who rely on their instructors to decide what is important to be learned, your Apprentice may want to have a say in that. In fact, educators say that adults differ significantly in how they approach learning. The concepts that drive adult learners include personal benefit, experience, self-direction, application and action, and learning styles. Keeping these five principles in mind can help make your experience with your Apprentice more rewarding for both of you!

Personal benefit

Apprentices are looking toward a career in dairy farming. They must be able to see the personal benefit of what they are learning and how it satisfies their needs and contributes to their career goals. In general, adult learners are motivated to learn if the learning solves or avoids an identified problem, provides an opportunity or increased status, and leads to professional or personal growth. Making sure they understand why and how each task fits into the management of your dairy makes learning relevant.

Experience

Each Apprentice brings with them a unique background of knowledge and experience. Even if they have little experience in dairy farming, they may have knowledge that is of value to your operation. For example, many apprentices have had management level positions in other fields and those management skills can help you look at managing your farm in a new way. In general, adult learners are motivated to learn if the training can involve them in sharing what they know, builds on what they know, or validates their experience.

How children and adults learn

Children	Adults
Rely on others to decide what is important to be learned.	Decide for themselves what is important to be learned.
Accept the information being presented at face value.	Need to validate the information based on their beliefs and values.
Expect what they are learning to be useful in their long-term future.	Expect what they are learning to be immediately useful.
Have little or no experience upon which to draw, are relatively "blank slates."	Have substantial experience upon which to draw. May have fixed viewpoints.
Little ability to serve as a knowledgeable resource to teacher or fellow classmates.	Have significant ability to serve as a knowledgeable resource to the trainer and fellow learners.

Self-Direction

Many Apprentices, especially the older ones, are self-directed and are more comfortable having some control over what they are learning. They are motivated to learn if they can take charge of their learning and make decisions about the content and processes. DGA encourages Apprentices to take charge of their Job Book and have a voice in guiding their learning experience. Adult learners also value contributing to the learning of others. Having them teach the skills they've mastered to others is a good way to reinforce their learning.

Application and Action

Adult learners tend to be practical, and learn most effectively by doing. Dairy Grazing Apprenticeship is set up to take advantage of this hands-on learning approach. Adults learn best when there is immediate application of the learning, they participate actively in the learning process, and they can practice new skills or test new knowledge in real time. Organizing your Apprentice's training so that they are able to put their learning into use immediately can help reinforce these new skills.

Learning Styles

Each individual's personality and past experience influence how they learn most effectively. In general, your Apprentice will learn best when the learning taps into a mix of learning styles that fit their preferences and stimulate their unique aptitudes. For all learners, using multiple means of teaching to reinforce learning is an effective strategy. We each respond in varying degrees to the four main learning styles: Doer, thinker, feeler, and observer. While none is better or more effective than any other, Apprenticeship lends itself to people who are strongly in the Doer category: those who learn best in a hands-on setting. Consider using the Learning Styles worksheets on the following pages to help you and your Apprentice understand each other and help you frame their training to take advantage of their specific aptitudes and interests.

While *Doers* learn best through practice, a *Thinker* might need to prepare by reading some background material. Thinkers also tend to ask a lot of questions to better understand what you're doing. Like Doers, *Feelers* tend to benefit from personal experience as well as group interaction, so practicing a task, especially one that involves teamwork is an effective teaching strategy for them. For *Observers*, discussion is an effective way to introduce new tasks. Problem-solving is their strength, an aptitude that can be put to good use on the farm.

Adult Learning Styles

Doer: Likes to be actively involved in the learning process, wants to know how he or she will apply learning in the real world, likes information presented clearly and concisely.

Feeler: People-oriented, expressive, focuses on feelings and emotions, thrives in open, unstructured learning environment.

Thinker: Relies on logic and reason, likes to share ideas and concepts, analyzes and evaluates, enjoys independent work.

Observer: Likes to watch and listen, tends to be reserved, will take his or her time before participating, thrives on learning through discovery.

Incorporating learning styles into your teaching

Many chores on a dairy farm involve multiple steps. Tasks that you can just about do in your sleep will probably seem very complex to your new Apprentice. Creating checklists that break down each chore process will help the Apprentice commit them to memory and avoid leaving out important steps. A good example is the milking process.

Training methods for each learning style

- ***Doers:*** practice, applying concepts, simulations
- ***Feelers:*** personal experience, role playing, group exercises
- ***Thinkers:*** reading, questioning, independent activities
- ***Observers:*** presentations, discussion, problem-solving

The initial **overview** of the milking process frames the learning in an effective way for Observers and Thinkers. Providing reading material in advance helps those who need time to process information. A YouTube video would help engage both of these types of learners, as well as more active-learning Feelers and Doers.

A **demonstration** of milking provides all four learning styles with a more in-depth understand of the process and allows them to ask questions and explore the task through discussion with you and other employees. All learning styles benefit from demonstration, especially Doers and Feelers, who tend to be more visual learners.

Starting with description and demonstration helps the Apprentice increase their comfort-level with attempting a new task for the first time. **Practice** will allow them to gain proficiency in it. Doers and Feelers may prefer to jump into practice right away because of their inclination toward hands-on learning, but laying some groundwork with description and demonstration will result in fewer mistakes and help your Apprentice build confidence in their skills. Working alongside your Apprentice in their early months is a good opportunity to reinforce good work habits and foster a greater understanding of each task they learn.

Teaching how to milk

Start with an overview:

- Create a written checklist of the steps and post in the milking parlor.
- Describe the steps of the procedure.
- Explain the “why” for udder preparation:
 - To avoid milk contamination (including quality premiums)
 - To avoid mastitis causing bacteria entering the udder
 - To stimulate let-down; explain Oxytocin, its antagonist Adrenalin, its duration in the blood stream.

Demonstrate each step:

- Pre-and/or post dipping. Explain importance of task being done correctly: complete teat coverage, etc. Let Apprentice practice.
- Stripping and wiping. Again explain details and why: single towels, use of different places on the towels for each teat etc. Show different techniques on how to get milk out of the udder.
- Attachment of the milking cluster. Show proper attachment of milking cluster, i.e. not sucking air, and whatever else is unique about your particular cluster
- Reattachment. Next explain under what conditions to reattach an automatic take-off (if applicable). Without take-offs, explain when milking is considered finished and how to properly take off the cluster, i.e. shut off vacuum first, wait a second to let out vacuum, remove.

Practice

- Continue milking with apprentice until he/she is comfortable and proficient with all tasks before leaving them on their own.
- How quickly apprentices learn this and other processes/techniques varies greatly. It could be a couple milkings or a couple weeks. Adjust your teaching style to the apprentice’s learning style.

Personal Learning Styles Inventory*

*From *Train the Trainer: Facilitator's Guide* by Karen Lawson; Copyright © 1998 by Karen Lawson. Reprinted with permission of Jossey-Bass, a subsidiary of John Wiley & Sons, Inc.

Instructions: For each of the numbered items below, rank alternatives **a** through **d** by assigning 4 to the phrase that is **most** like you, 3 to the one that next describes you, 2 to the next, and finally, 1 to the response that is **least** like you.

Add up your scores for each response at the bottom of this sheet.

	Ranking
1. When solving a problem, I prefer to	
a.) take a step-by-step approach	<input type="text"/>
b.) take immediate action	<input type="text"/>
c.) consider the impact on others	<input type="text"/>
d.) make sure I have all the facts	<input type="text"/>
2. As a learner, I prefer to	
a.) listen to a lecture	<input type="text"/>
b.) work in small groups	<input type="text"/>
c.) read articles and case studies	<input type="text"/>
d.) participate in role plays	<input type="text"/>
3. When the trainer asks a question to which I know the answer, I	
a.) let others answer first	<input type="text"/>
b.) offer an immediate response	<input type="text"/>
c.) consider whether my answer will be received favorably	<input type="text"/>
d.) think carefully about my answer before responding	<input type="text"/>
4. In group discussions, I	
a.) encourage others to offer their opinions	<input type="text"/>
b.) question others' opinions	<input type="text"/>
c.) readily offer my opinion	<input type="text"/>
d.) listen to others before offering my opinion	<input type="text"/>
5. I learn best from activities in which I	
a.) can interact with others	<input type="text"/>
b.) remain uninvolved	<input type="text"/>
c.) take a leadership role	<input type="text"/>
d.) can take my time	<input type="text"/>
6. During a lecture, I listen for	
a.) practical how-to's	<input type="text"/>
b.) logical points	<input type="text"/>
c.) the main idea	<input type="text"/>
d.) stories and anecdotes	<input type="text"/>
7. I am impressed by a trainer's	
a.) knowledge and expertise	<input type="text"/>
b.) personality and style	<input type="text"/>
c.) use of methods and activities	<input type="text"/>
d.) organization and control	<input type="text"/>

Learning Styles Inventory (cont.)

8. I prefer information to be presented in the following way

- a.) model such as a flow chart
- b.) bullet points
- c.) detailed explanation
- d.) accompanied by examples

9. I learn best when I

- a.) see relationships between ideas, events, and situations
- b.) interact with others
- c.) receive practical tips
- d.) observe a demonstration or video

10. Before attending a training program, I ask myself, "Will I ...?"

- a.) get practical tips to help me in my job
- b.) receive lots of information
- c.) have to participate
- d.) learn something new

11. After attending a training session, I

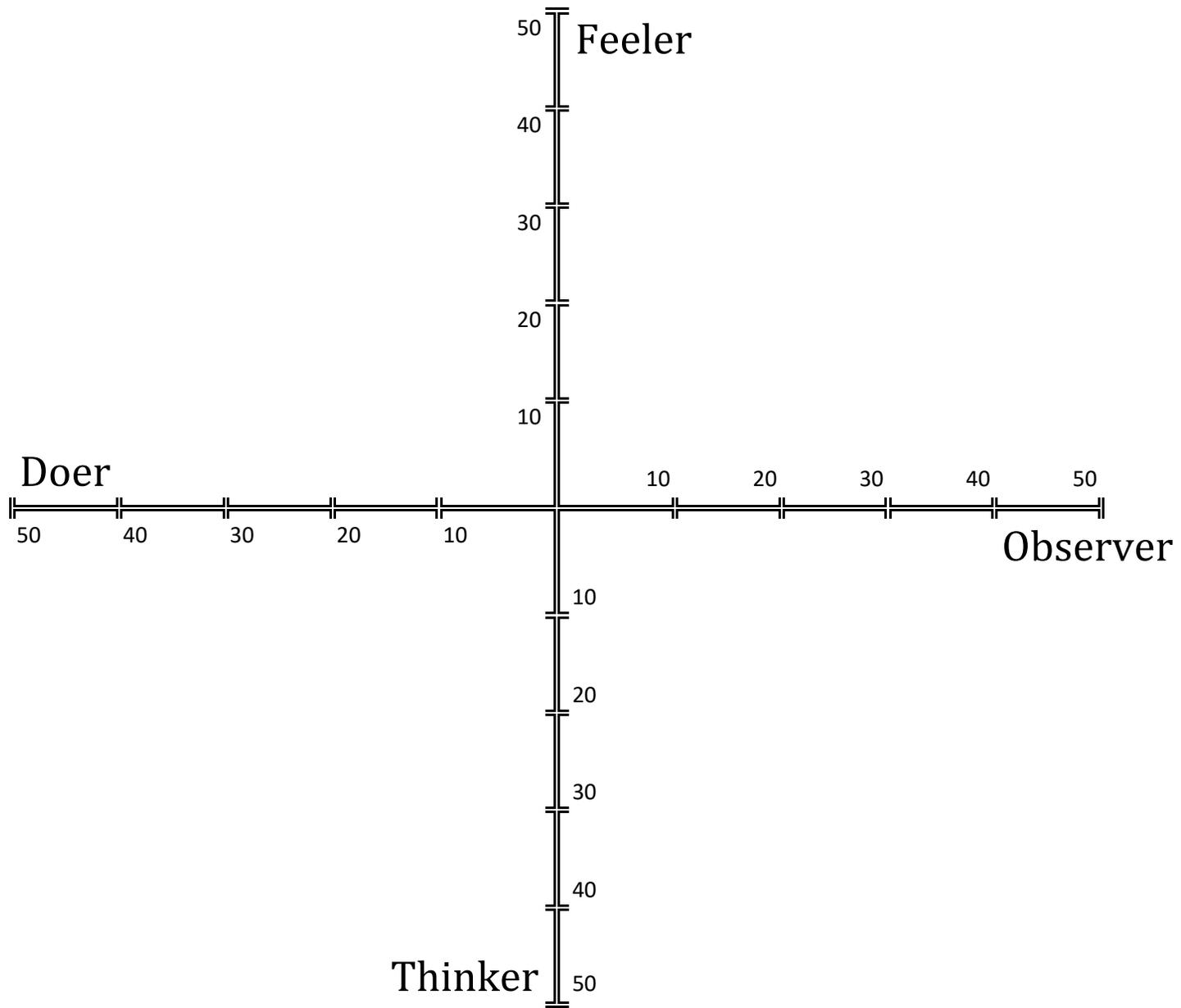
- a.) tend to think about what I learned
- b.) am anxious to put my learning into action
- c.) reflect on the experience as a whole
- d.) tell others about my experience

12. The training method I dislike the most is

- a.) participating in small groups
- b.) listening to a lecture
- c.) reading and analyzing case studies
- d.) participating in role plays

	Feelers	Observers	Thinkers	Doers
1 c		1 a	1 d	1 b
2 b		2 a	2 c	2 d
3 c		3 a	3 d	3 b
4 a		4 d	4 b	4 c
5 a		5 b	5 d	5 c
6 d		6 c	6 b	6 a
7 b		7 d	7 a	7 c
8 d		8 a	8 c	8 b
9 b		9 d	9 a	9 c
10 d		10 c	10 b	10 a
11 d		11 c	11 a	11 b
12 c		12 a	12 d	12 b

TOTALS				
	Feelers	Observers	Thinkers	Doers



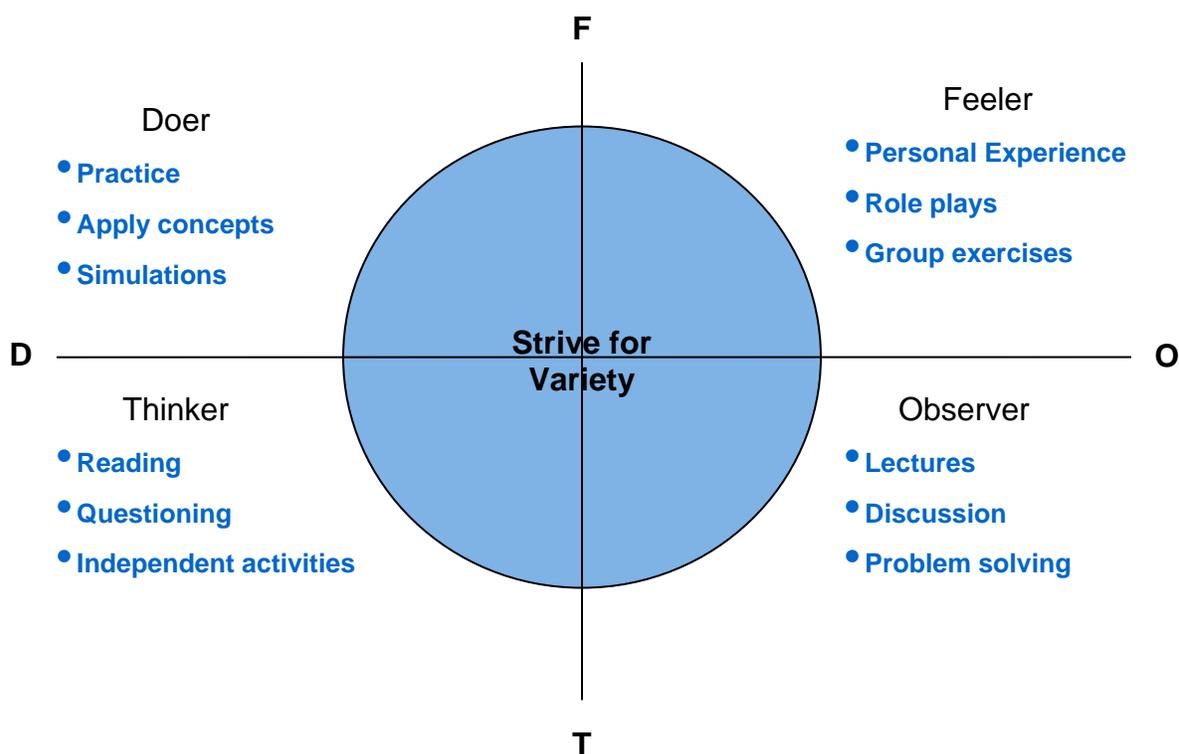
Learning Styles *

<http://www.go2itech.org/HTML/TT06/toolkit/assessment/adults.html>

Four Categories of Learning Experiences or Styles

- **Doer:** Likes to be actively involved in the learning process, wants to know how he or she will apply learning in the real world, likes information presented clearly and concisely.
- **Feeler:** People-oriented, expressive, focuses on feelings and emotions, thrives in open, unstructured learning environment.
- **Thinker:** Relies on logic and reason, likes to share ideas and concepts, analyzes and evaluates, enjoys independent work.
- **Observer:** Likes to watch and listen, tends to be reserved, will take his or her time before participating, thrives on learning through discovery.

Training Methods and Learning Styles



* Adapted from Lawson, K., *The Trainer's Handbook*, 1998, San Francisco, CA: Jossey-Bass.