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**Problem Solving *OR*
Appreciative Inquiry--
*Which is Best?***

Attacking Sacred Cows or Thoughtful Reflection?

By Billye Foster

Problem solving is the process of moving toward a goal when the path to that goal is uncertain (Michael Martinez). John Dewey developed a series of steps that are referred to as the problem-solving sequence.

Appreciative Inquiry is about the co-evolutionary search for the best in people, their organizations, and the relevant world around them. (David Cooperrider and Diana Whitney). *Appreciative Inquiry* has been referred to as the art and practice of asking questions that strengthen a system's capacity to apprehend, anticipate, and heighten positive potential.

One of the best things about Agricultural Education is the consistency of our philosophy and the concepts that evolve from the tenets found within said philosophy. One of the most dangerous things about Agricultural Education is the consistency of our philosophy and the concepts that evolve from the tenets found within said philosophy. As much as we believe we have the premiere educational system at hand, it is wise to sometimes take a step back and look at a bigger picture. Perhaps there are other ways of doing that are just as effective--possibly even better in certain situations. Such were the thoughts rolling around in my head when I chose this theme.

Ever notice how things sometimes seem to fall together? Recently I was in Reno, Nevada at the American Association of Agricultural Educator's annual research meeting and conference. The first night there I attended the Barrick Seminar. This

is a recent addition to the format of the meeting due to the generosity of Dr. & Mrs. Kirby Barrick. Each year a seminar on or about Agricultural Education is presented by a well respected member of the profession. This year's presentation was by Dr. Robert Warmbrod and his memories and reflections on the infamous "Green Book".

If you are a newcomer to this profession, or perhaps someone just skimming this magazine, you should know that in 1985 a study on agricultural education in the secondary schools was initiated due to concerns about the declining profitability of American agriculture and the declining enrollments in agricultural education programs. The Committee on Agricultural Education in Secondary Schools was established by the National Research Council at the request of the U. S. Secretaries of Agriculture and Education. This committee was charged with assessing the contributions of instruction in agriculture to the maintenance and improvement of U. S. agricultural productivity and economic competitiveness (*Understanding Agriculture*, pg. v.).

Much more detail could be provided, but the most memorable outcome of this venture was the publication of a small green book, *Understanding Agriculture--New Directions for Education*, affectionately known as "The Green Book".

Just as this issue serves to compare and contrast the value of problem solving and appreciative inquiry, Dr. Warmbrod's reflections provided a format for our own reflections. Can

you remember what Agricultural Education was like in 1985? What did programs and teachers focus on as their primary goals? What were their weaknesses? For that matter, do you know the principal findings of this study? The three year process ended with the publication of *Understanding Agriculture* in 1988.

Perhaps it is time for us all to reflect on the path Agricultural Education has taken over the past twenty years. The first principal finding of the study is noted below. As you read this issue, I challenge you to reflect on how much Agricultural Education has or has not changed....

- **Agricultural education in U. S. high schools usually does not extend beyond the offering of a vocational agriculture program.**

Only a small percentage of students enroll in these programs. Consequently, most high school students have limited or no access to vocational agriculture or agricultural literacy programs. Minority students in urban schools have the least access to these programs (*Understanding Agriculture*, pg. 2).

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**Problem Solving OR
Appreciative Inquiry--
Which is Best?**

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PBL vs. AI: Which is better..., you ask?

by Bobby Torres

Invest a few moments in thinking. It will pay good interest.

~Author Unknown

I have always been an advocate for teaching students how to think. After all what could be more important in the growth and development of a student? Whether we teach kindergarten or college students, arguably, thinking is the single most important process skill. Many of us recognize this and make every effort to engage students in meaningful dialogue and activities that yield such results. There are several well known (and other little known) instructional methods, approaches and/or strategies that,

if used correctly, yield wonderful learning results, including, yes, thinking. A not so exhaustive list includes Socratic dialogue, case studies, brainstorming, discussion groups, cooperative learning, Think-Pair-Share, etc.

This issue highlights two teaching approaches--problem-based learning and appreciative learning. One is well known (the former) within the teaching ranks of agricultural education; the other (the latter) not so well known. The problem-based learning (PBL) approach (not to be confused with the problem-solving approach) continues to demonstrate its value in the secondary agriculture classroom. Anderson and Burris discuss the relative value and benefits of problem-based learning.

PBL focuses on a curriculum topic that develops both problem-solving strategies and interdisciplinary knowledge bases and skill. Students are placed in roles of active investigation seeking probable solutions to ill-structured problems that mirror real-world situations.

Frazier, Lawver and Lambert introduce us (and me) to appreciative inquiry. Appreciative inquiry is structured around four D's... Discover, Dream,

Design and Destiny. Each stage has a unique and specific learning objective. However, what makes appreciative inquiry unique is not the four D's, rather, it is what is at the core of this approach--the value teachers place on students. AI focuses on the positives in student successes and building learning on their accomplishments. Essentially, this approach searches for the best in students.

Problem-based learning and appreciative inquiry have several functional similarities. Both approaches begin with a discovery/problem situation and lead to behavioral, cognitive and emotional engagement among students. How each approach accomplishes these outcomes is different. Which is better? Read on to learn more...



Which to use to build my house???



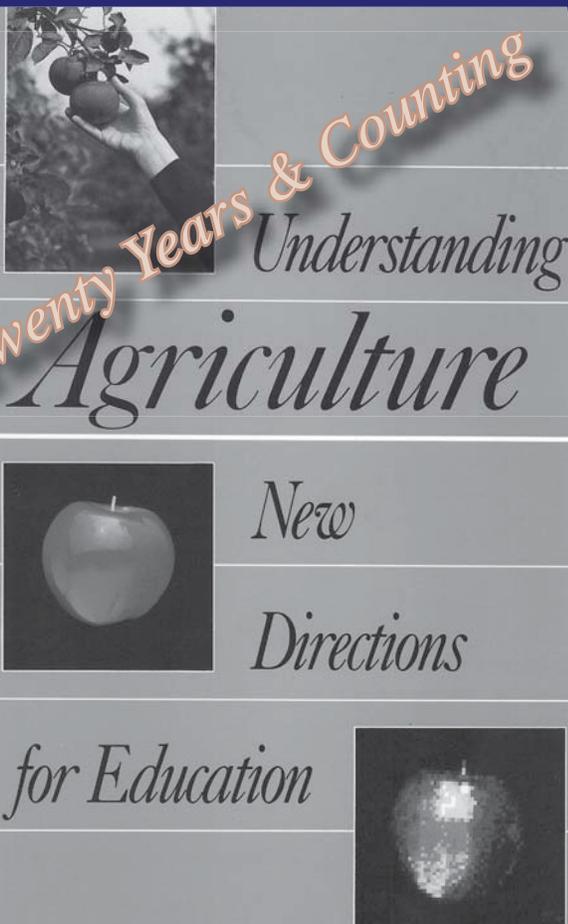
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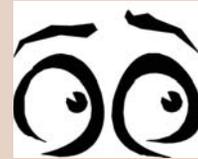
Leadership opportunities for underrepresented populations-- What are YOU doing?"

Diversity is about empowering people and promoting the human spirit. It makes an organization/group effective by capitalizing on all the strengths of each participant or member. Simply enforcing government regulations will not get you to be the best. To obtain the fullest competitive edge you need to create great teams by using the full potential of every individual. Teams are much more than a group. A group is a collection of individuals where each person is working towards his or her own personal goal or agenda, whereas a team is a collection of individuals working towards a common goal or vision. This creates a synergy effect within the team -- one plus one equals much more than one.



Twenty Years & Counting
Understanding
Agriculture
New
Directions
for Education

OOPS!



The January/February issue (Volume 80, Issue 4) has an error! On page 8, the ending of Frank Flanders' article entitled, "Cultivating a Program for Sustainable Agricultural Education," cut off part of the last paragraph. The ending should read...

The best hope for ensuring sustainability of Agricultural Education lies in Agricultural Educators' ability to come together as a team to successfully address the challenges and opportunities facing the profession. The profession must work together for Agricultural Education to continue to be a powerful and effective force for guiding students to a successful future.

Pardon our error.

PBL: Less Content, More Process

By
Scott Burriss

Chances are, you probably had a college professor in your “teaching methods” course who used the toolbox analogy. Remember, each teaching method is a “tool”. We often need to “drive in” a point using our lecture hammer. Sometimes, we need to assess the scope of a subject area using our discussion tape measure. A good teacher develops skill in using all of the tools. They are all kept safely in the “toolbox,” ready to be called to action in the perfect situation. Sound familiar?



It worked well for me. In fact, I carried many of those same lessons to my actual agricultural mechanics laboratory. Lessons like “every tool has a specific use,” “always take pride in your craftsmanship,” “take good care of your tools,” “and be creative in what you build, but always use your tools as they were intended.”

Back to the analogy, I often found myself using my “teaching tools” the same way. Each tool had a specific function and could only be used exactly as intended. The current educational climate has presented several challenges to agricultural education. Today, we are faced with helping our students become independent thinkers and problem solvers, we are looking for opportunities to integrate core subjects into agricultural content and contribute to school accountability and standardized testing, and we struggle to make the concepts

in our classes meaningful for students. To be successful, it is imperative that we learn to use our tools in more creative ways.

Problem-Based Learning

Problem-based learning is a teaching tool that is very much consistent with the idea that students create or construct their own understanding. Savory and Duffy (2001) identified eight principles that support this approach. The following principles can help educators design experiences to help students construct their own understanding.

1. Anchor all learning activities to a larger task or problem.
2. Support the learner in developing ownership for the overall problem or task.
3. Design an authentic task.
4. Design the task and learning environment to reflect to complexity of the environment they should be able to function in at the end of learning.
5. Give the learner ownership of the process used to develop a solution.
6. Design the learning environment to support and challenge the learner’s thinking.
7. Encourage testing ideas against alternative vies and alternative contexts.
8. Provide opportunity for and support reflection on both the content learned and learning process.

As teachers, trying to accomplish all of those things at once can be challenging and time consuming. That's where PBL comes in. Supporters of PBL claim that it promotes student-centered and lifelong learning, is more nurturing and enjoyable than traditional methods of instruction, and improves student motivation and teamwork. PBL can also be effective in improving problem-solving and critical thinking abilities.

In addition to critical thinking, PBL also emphasizes student understanding and learning how to learn. PBL was designed to help students meet the following goals: 1) construct an extensive and flexible knowledge base; 2) develop effective problem-solving skills; 3) develop self-directed, lifelong learning skills; 4) become effective collaborators; and 5) become intrinsically motivated to learn.

Over the past decade, several models have attempted to capture the process of PBL. Some of these models are elaborate and others simple, but they have several key components in common. In PBL, students learn by solving problems and reflecting on their experiences. PBL situates learning in real-world problems, making students responsible for their learning and promoting active learning. The process places emphasis on both helping learners develop strategies and constructing knowledge.

Uniquely Attractive

Several characteristics of PBL make it uniquely attractive. PBL is often interdisciplinary. Knowledge and skills needed to solve real world problems are not acquired

in a compartmentalized fashion. Solutions developed by students in a problem-based format have multiple outcomes. Rarely do problems encountered in real life have only one narrowly defined solution. Students learn skills that overlap in competency areas often integrating writing and math into developing their solutions. Finally, PBL emphasizes metacognitive or

PBL (Problem Based Learning) was designed to help students meet the following goals:

- 1) construct an extensive and flexible knowledge base;*
- 2) develop effective problem-solving skills;*
- 3) develop self-directed, lifelong learning skills;*
- 4) become effective collaborators; and*
- 5) become intrinsically motivated to learn.*

higher-order skills. Students develop problem-solving and critical thinking skills as they work toward the solution of the real world problem.

PBL is set apart from other strategies by the type of problem focused on in instruction. The traditional problem-solving methods have been characterized by the existence of a clearly defined problem. Problem-based learning, in contrast to traditional problem-solving approaches, is characterized by the inclusion of a messy, ill-structured

problem. According to Lohman (2002), ill-structured problems have the following characteristics:

1. The exact nature of the problem is unclear and some information, but not enough to solve the problem, is provided.
2. More than one way to solve the problem exists.
3. The problem does not have a single right answer.

PBL begins with a problem situation, the basis for learning, in which the students encounter before any preparation or study has occurred. Students encounter the problem in the same manner they would in the real world. Students often work in groups to find a solution to the problem. Needed areas of learning are identified and used as a guide to individualize study. Knowledge and skills that are learned in the process are applied to the problem. Finally, learning that has occurred is integrated into the student's existing knowledge base.

Less Content, More Process

The role of the teacher takes on a much different form in PBL as compared to more traditional instructional strategies. Most often the teacher will assume the role of a facilitator, guide, or coach. Teaching using the PBL technique is less about the content and more about the process. With the right help, feedback and support, students will uncover the appropriate content on their own.

Savory, J.R., & Duffy, T.M. (2001). Problem based-learning: An instructional model and its constructivist framework

Continued on page 10

Problem-Based What? A Case Study on the Learning Outcomes of PBL

by James Anderson

The spring semester of the student teaching internship has come to a close and we welcome a new class of professionals into the folds of teaching agriculture. As I reflect on the lessons I have observed over the past years from student teaching interns, and even experienced teachers, I have come to the conclusion that variability in instruction continues to be an area of needed improvement in agricultural education. According to Rosenshine & Furst (1971), *Clarity, Organization, Enthusiasm, Task-oriented behavior, Provision of opportunities for students to learn criterion material, and Variability* were the most promising teacher behaviors associated with student learning. As a teacher educator, I try to emphasize the importance of these characteristics to my agricultural education students. And to their credit, they do a very good job of recognizing opportunities to incorporate the first five characteristics into the learning process, but continue to struggle with variability. Most often I see the use of technology, exciting games, or group activities as a way to vary instruction. However, it has become predictable and sometime repetitive to see such instructional strategies used. Unfortunately, as these effective practices become standard, we lose variability.

Why Variability?

Why is variability so important in instruction? Well according to the Principles of Learning and Teaching (Newcomb, McCracken, Warmbrod, & Wittington, 2004), students must be motivated to learn. Instructors must take into account their students' interests, desires, abilities, and learning styles. Just as our students vary, so should the instruction used to teach them. Variability does not mean a departure from lecture, but the use of various strategies and resources to disseminate information. One such strategy that has had critical acclaim in other disciplines, such as medicine, but has yet to gain popularity and widespread use in agricultural education is problem-based learning (PBL). I believe that PBL is a very effective instructional strategy and would provide variability if added to a teacher's repertoire. To this end, this article will discuss a case study on the learning outcomes of PBL in an agriculture class.

The Case

A group of 110 freshmen from the Chicago High School for Ag Sciences was selected to participate in a case study to determine the learning outcomes of PBL. The group was selected because they possessed two unique characteristics that were desirable for this study. First, the students are selected from all over the city from various social, ethnic and educational backgrounds. Second, Sheila Fowler, the instructor

who would teach the students, had past experience with facilitating PBL. Therefore, the group gave us an opportunity to study a large group of diverse students being instructed by one instructor in their natural learning environment. The group was randomly assigned to one of four sections of a course on agricultural leadership. Each group was assigned an instructional strategy of either PBL or teacher-guided learning (TGL) for five instructional units on leadership theory. Leadership development content was chosen as the unit of instruction because it is inter-curricular, socially relevant, and would not be a departure from the course curriculum. The TGL group, which totaled 56 students, was taught by the teacher using computer generated presentations and application activities. The remaining 54 students who made up the PBL group were given a case study, reference materials and questions to guide their individual research. Each member of the group was given one of the five topics to research and teach to the rest of their group. Finally after all topics were taught, they were asked as a group to provide a recommendation for a solution to the problem presented in the case study using the concepts they had learned. At the conclusion of the 10-days of instruction, students in the PBL group were asked to reflect on their learning experience. In addition, the instructor was asked to reflect on the outcomes

of both instructional strategies. Their reflections were used for the purpose of this case study on PBL.

Student and Teacher Reflections

In this study, we asked the students and the teacher to reflect on the experience and their preferred

method of instruction. The focus was to find themes that expressed which instructional strategy motivated students to make connections with others (emotional engagement) and to persist in learning regardless of content difficulty (cognitive engagement). Additionally, the teacher was asked to comment on student participation (behavioral engagement). Only the students

from the PBL group were asked to complete the reflection because they received the treatment as well as had prior experience with traditional instructional strategies and therefore could adequately provide a student's comparison of both instructional strategies. Figure 1 is a summary of the students' and teacher's reflections.

Student Reflections	Teacher-Guided Learning	Problem-Based Learning
Teacher Observations	<p>Cognitive Engagement</p> <ul style="list-style-type: none"> ▪ Easier to learn information when working alone ▪ Teachers present information in an easy and clear manner ▪ Can learn more information dealing with one problem at a time instead of several at once <p>Emotional Engagement</p> <ul style="list-style-type: none"> ▪ Working in groups slows down the learning process ▪ Feel more confident with the information teachers present ▪ Don't like depending on other students <p>Behavioral Engagement</p> <ul style="list-style-type: none"> ▪ Students completed assignments with reinforcement from teacher ▪ No extra effort taken by students to learn content <p>Cognitive Engagement</p> <ul style="list-style-type: none"> ▪ Students memorized the basics of each theory ▪ Students performed well with knowledge questions but could not answer comprehension or application questions. <p>Emotional Engagement</p> <ul style="list-style-type: none"> ▪ Students expressed frustration with content level being over their heads ▪ Students relied heavily on guidance from teacher 	<p>Cognitive Engagement</p> <ul style="list-style-type: none"> ▪ Uses more in-depth thinking to figure out solutions ▪ Have to answer questions using more than "yes" or "no" ▪ Develops skills for researching and presenting information <p>Emotional Engagement</p> <ul style="list-style-type: none"> ▪ Feels in control of the learning process ▪ Something new and exciting ▪ Able to work in groups and develop friendships <p>Behavioral Engagement</p> <ul style="list-style-type: none"> ▪ Students demonstrated positive collaborative efforts ▪ Most students actively researched information on their objective <p>Cognitive Engagement</p> <ul style="list-style-type: none"> ▪ Students had a deeper knowledge of the content they research ▪ Students used higher-ordered thinking to connect information learned to the process of finding a solution <p>Emotional Engagement</p> <ul style="list-style-type: none"> ▪ Most students displayed a sense of ownership for assigned duties ▪ Students seemed to enjoy the process regardless of the difficult content

Figure 1. Summary of Students' and Teacher's Reflections

In sum, the teacher believed that the PBL approach would help in students' behavioral, cognitive, and emotional engagement because of the collaborative and inquiry-based methodology. The teacher noted:

I think the PBL students learned more content about their objective, specifically, but I tend to think that the TGL group learned more content overall--at a more shallow level. Because the students in the PBL group had to spend a large amount of time focusing on their topic, I believe they probably learned their assigned theory better than anyone in the TGL group learned any of the theories. When it came to "teaching" objectives to the rest of the group, most students felt uneasy because of the difficulty of the content and did not feel confident that they had completely learned the other objectives. Although students had trouble understanding the theories that they had not individually researched, the students had a broad understanding of the overall concepts and were able to work collaboratively to develop a satisfactory resolution. I would also assume that the PBL students would retain the knowledge they learned about their particular objective better than anyone else in any section. From my perspective, the students in the PBL classes benefited in ways that cannot be accomplished with traditional teaching methods.

Stepping Out of Our Comfort Zone

Through this case study, we have learned that both the students and the teacher viewed the PBL activity as a meaningful experience. Although PBL is a fairly unknown instructional strategy in agricultural education, it

has the potential of being one of the most effective instructional strategies if facilitated correctly. It helps to develop students' problem-solving skills, interpersonal skills such as teamwork and communications, and provides a vehicle in which students can take ownership of their education. Although we have other instructional strategies in agricultural education that provide similar learning outcomes, the additional benefit of PBL is that it varies instruction. Teaching is not only a science, but an art. As artists, we must continue to improve our skills by challenging ourselves to experiment with and use various techniques and media. It is through creative instructional strategies and relevant content that we will continue to motivate our students to learn. It is time that we step out of our personal comfort zones and challenge ourselves to find the most innovative ways to provide instruction. As with any new method, incorporating PBL into our instructional repertoire may not be easy. However, if we wanted an easy job, we would not have become agricultural educators.

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Do you Have AI in Your Toolbox?

by Rebecca Lawver & Misty Lambert

Teachers are always looking for new and interesting teaching methods to add to our Teaching Tool Box. We have one to suggest: appreciative inquiry. What is appreciative inquiry (AI), you ask? Well, let's begin by breaking the terms down to explain the concept.

APPRECIATE: *Valuing and recognizing the best in people and the world around us.*

INQUIRY: *Exploring and discovering new potentials and possibilities.*

Appreciative inquiry, therefore, is a positive way of exploring the value of the world around us. It focuses on strengths, successes, values, hopes, and dreams with the idea that these can be transformational, for both the student and for the classroom environment (Corporation for Positive Change). In AI theory, there is a connection between positive images and positive actions. It is a way to manage change in an organization.

There are four basic components of appreciative inquiry that can be described by the 4-D Appreciative Inquiry Cycle (see Fig. 1). The **DISCOVERY** stage is an understanding of the "what is and what has been". This forms an appreciation and value for the topic you are studying and helps create a conversation about what is working well while moving the group into a positive interaction. The **DREAM** stage involves identifying "what might be", as well as possibilities for

improvement or potential outcomes. The **DESIGN** stage engages individual contributions to identify "what should be". Here, individuals create possibilities or suggest positive changes to be implemented. Finally, the **DESTINY** stage continues ongoing learning and innovation of "what will be". At the center of appreciative inquiry is the **POSITIVE CORE** or positive question. This four-phase cycle begins with a positive question which is critical to the outcomes of the classroom. It creates hope and momentum around a meaningful purpose. The 4-D cycle provides a framework for continual learning and cycles back to the beginning of the process to discover what is working best.

Now, for the second question: *how can I use this as an agriculture teacher?*

The process all starts with identifying what is to be studied and asking the positive question. Questions could be asked in several ways in regards to the topic such as a story, identifying what is of value, discussing what is good or by visioning for the future (Norum, 2001). How we ask the question is also important. Design questions which are stated in an affirmative way using positive language. The topics you select provide a framework for gathering stories and sharing among students. The ability to draw on common history and experiences with students will provide them

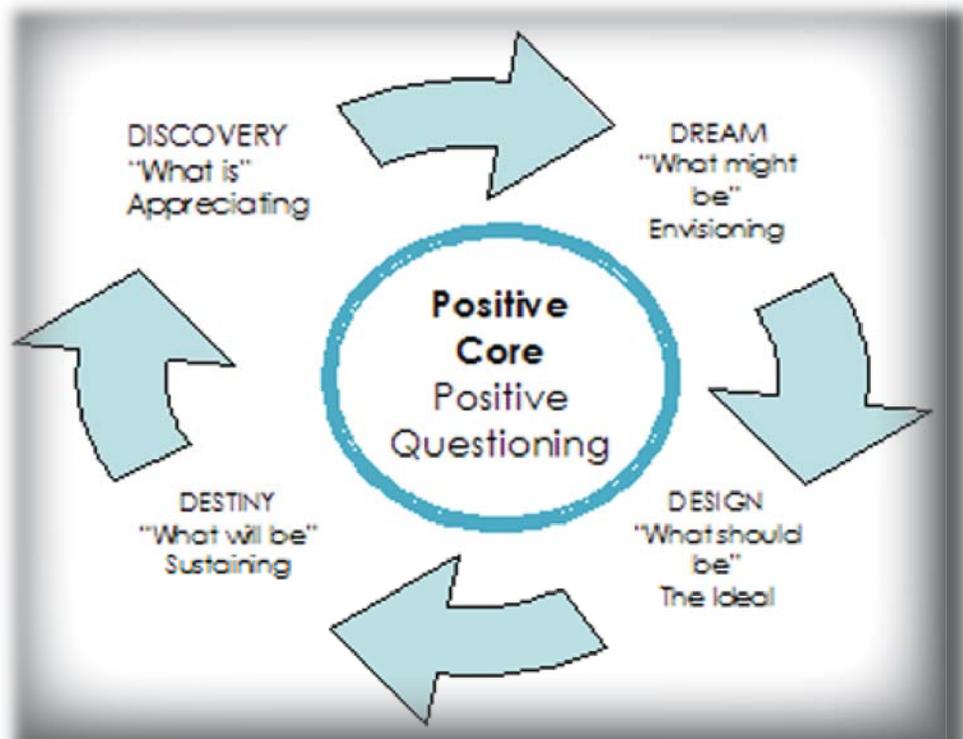


Figure 1, 4-D Appreciative Inquiry Cycle

with the knowledge that they can apply to real world situations. This process celebrates and even seeks out the students' own positive experiences and successes. Students are capable and we can encourage them to be successful as we focus on bringing their experiences to class. This entire process must be guided by the belief that all students bring their own varied roles in work, classes, organizations, relationships, and teams. This means that concepts and insights are more personally meaningful because they are based on personal experiences and are, therefore, easily relatable for the students (Ybelle & O'Connor, 2000). By building this positive and inquisitive environment, a rapport begins to develop that encourages trust and safety between teachers and students. This process will provide students with the opportunity to learn in a new and exciting way.

As students draw on their own positive experiences, they will need typical guidance to stay on-task. For example, if beginning a unit on animal nutrition, the appreciative inquiry approach would want to explore nutrition, ensuring experiences and stories from the students are included. What is good nutrition? What experiences have you had with healthy animals? What can good nutrition do for animals? What does good nutrition mean? Here is where most teachers diverge from the appreciative inquiry process. The next step is NOT to ask what is wrong, but rather, "how can I use this information about what works to adjust the things that might need improvement?" So, nutrition is now taught using what the students know. You will be amazed at what a group of students can tell you about good nutrition. But, they won't know everything. The parts they don't know are filled in by the instructor. Once an animal nutrition "problem" is evaluated against the known standard, changes

can be made to improve the diet. This is not a replacement for the problem solving approach to teaching, but rather a framework in which problem solving can be posed. When approaching life and other issues as a positive experience to be enjoyed rather than a problem that needs to be solved, the shift in perspective leads to a transformation that can reinvent the classroom environment (Yballe & O'Connor, 2000). It is the problem-solving approach that pulls solutions from a common pool of knowledge and experiences.

The next question is: Can appreciative inquiry be used to build positive group dynamics in our student organizations? In fact, this is the arena in which appreciative inquiry was first developed. As we work with our FFA chapter and officer team, the appreciative approach is aimed at valuing the "good" qualities in their teammates as well as focusing on what the group is doing well and vision for the future. If, for example, the group is doing well with organizing committees but not with fundraisers, the AI approach would have the group focus on the good parts of the committee organization process to explore "what's working" and find ways to fix the fundraiser shortcomings.

Appreciative inquiry is a tool all teachers should have in their toolbox. It is a student centered approach that increases interpersonal and team building skills, as well as higher order thinking skills. The students become responsible for their own learning, while the teacher has interested, invested students. Who wouldn't want that tool in their toolbox?

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Teaching with the four D's of Appreciative Inquiry

By David Frazier

As a new agricultural science teacher, I remember feeling that I had been given the distinct opportunity of making a difference, not only in the lives of my students but in the lives of their families and the lives of those that were involved in our school and community as well. I remember entering my classroom for the first time. My mind was going a hundred miles an hour with ideas and expectations that I had been planning for during the past four years as a pre-service teacher. I had dreamed time and time again of the classes that I would teach; however, as I unlocked the door to my classroom for the first time, my mind began to whirl and questions began to fly at me from all directions: What do I really know about this place? Am I ready to teach in my very own program? Will my students enjoy my teaching style? Can I really teach these students? How am I going to make things happen? As I stood at the periphery of my new career, I realized that for the first time in my life I had been given the sole responsibility of educating my very own students. I was excited and terrified at the same moment.

The Approach

As I began remembering teachers in my past, I realized that many were problem-solvers--the kind of individuals who see what needs to be fixed and concentrate their efforts in these areas. These were teachers who concentrate so much of their efforts on the 1% that needs to be

fixed that they often neglect to care for the 99% that works just fine. In order to build a solid foundation for my teaching style, I decided to concentrate on the positives right away. I wanted to build on "what is" rather than fixing "what should be". I later learned that the approach I had taken was appreciative inquiry. Appreciative inquiry implements four D's: discover, dream, design and destiny. In addition to the four D's, the appreciative inquiry teaching approach uses teamwork in its participatory approach to learning. By using questions, appreciative inquiry seeks to find and develop a better understanding of "what is" which allows the positive in a situation to be uncovered and accentuated. Once positives are identified; the "what could be" is the next logical step. This second step encourages learners to look beyond the current situation and see the possibilities that are within reach. The third step leads into the "what should be" which persuades the learners to take a deeper look into the possibilities and find those which represent the best of what should be. Finally, learners enter into the design element of application where they actually complete the process. This learning phase was one that I felt would meet the needs of my students and provide them with a positive educational experience.

Making Thinking Interesting

My first few weeks of teaching brought many challenges and

obstacles; however, one thing stood out in my mind--my students were genuinely interested in this teaching approach. Not only did I have great participation by each of the students, I also witnessed as understanding and learning took place on a daily basis. Students would enter my classroom with ideas and comments from the previous lesson, thus proving to me that retention was being fostered through interest. Another unique factor of this teaching approach was that it created interest and teamwork amongst all learning levels--from moderate learning disabled to gifted and talented. By the end of the semester, it was evident that the appreciative inquiry teaching approach was my style of teaching.

So what made it work? The answer was simple: Discover, Dream, Design and Destiny. Each of my lessons began with the discover stage, thus allowing my students to evaluate what they really knew about the subject. I encouraged them, sometimes in groups and sometimes individually, to list as many things as they could in regards to the subject being taught. I used thought-provoking questions to encourage the group to go beyond their initial reactions and dive deeper into their personal knowledge of the topic. Students were also encouraged to ask questions of me and their peers. Once they became comfortable with the process, I discovered that students who were more confident with the topic would begin asking questions and encouraging others to "discover" their own knowledge

base. This was especially true of my honor students who began to realize how fun it was to actually help others in their quest of knowledge. Thinking became interesting!

Making Learning Meaningful

Once students had unveiled all they knew about the subject, we began the dream segment with another round of questions, this time encouraging students to envision what might be. In a landscape design class, it may include “what might be” with a particular landscape; in animal science it could be looking into “what might be” when evaluating a sick animal. The uses for this type of teaching are limitless in agricultural science classes. During the brainstorming segment, no answer was “wrong” and all suggestions were recorded and discussed. I found that student interest escalated as they began using their imaginations--moving from concrete solutions to abstract possibilities. Again, I would plug in a few questions to foster higher-order thinking and to maintain direction; however, most of the time students were off and running on their own.

Eventually students would exhaust their visions as to what might be, and we would enter into the design phase of the learning approach. In this phase, students were asked to construct a design that would show what we needed to do or learn in order to complete the project. In my food science class, this might include learning the steps to fabricate a hog carcass; in horticulture it might be learning how to properly construct a particular floral design. In any case, students were again hit with a barrage of questions that encouraged them to think about what should be learned or what should be done in order to complete the objectives of

the lesson. With my guidance, we would develop a plan or a design that would guide us through the learning process. I was amazed at the interest that students showed as they developed ownership in the lesson. As a teacher, I found it surprisingly easy to guide students into the objectives that I knew needed to be taught. As with all great events, a plan was eventually constructed and it was time to move to the final phase of appreciative inquiry: destiny.

Producing Learning Results

I must admit, the destiny phase of appreciative inquiry was the phase I enjoyed most. This was the phase where I got to teach what the students had “decided” were the most important objectives within each topic. Sometimes this was done through classroom discussions and lectures, but most of the time it would include some type of hands-on learning. Whether it was constructing a project in agricultural mechanics or aging a deer in wildlife management, each lesson was “developed” by the students (although guidance was provided by me) and because of this, the “ownership” was transferred to them. I was also amazed at how easy it was to remind students that with their ownership came a shared responsibility for learning the objectives of the topic. The thing that amazed me most in this step is the seriousness that most of the students displayed when it came to learning the material. Not only did students listen intently and show sincere interest, they often amazed me with higher-level questions that illustrated to me that they were processing the information given.

As a new teacher ready to begin, or as an experienced teacher ready to

move to the next level, appreciative inquiry is a tool that will allow you to do just that. It incorporates a teamwork method that is vital in today’s academic arena and allows you to utilize your students in the development of their class. It also uses collaborative inquiry that enables students to work as a team to discover, dream about, design and determine the final destiny with a particular goal. Most importantly, it begins with the positive knowledge base and allows students to learn in a way that is encouraging, motivating, exciting and fun. As I look back on the day I entered my classroom for the first time, I realize that adopting a teaching approach as powerful as appreciative inquiry has allowed me to change the lives of hundreds of students in a manner that was fun, entertaining and educational!



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Sustainability of SAE via Horticulture in Urban Agriculture Programs

by Dan Lassanske & Wendy Warner

The decline of Supervised Agricultural Experience (SAE) has been well documented. Research has identified several factors responsible for this decline including a decrease in extended contracts and elimination of SAE supervision periods (Steele, 1997), lack of student motivation, limited student opportunities, lack of teacher time, inadequate financial resources and facilities, and low parent interest (Osborne, 1988 as cited in Dyer & Osborne, 1996). Additionally, Whaley and Lucero (1993) identified several barriers to SAE in urban schools: program completers, support at home/role models, crime, overcrowding, and community safety.

Dyer and Osborne (1995) concluded that “while teachers claim to support the concept of SAE, many fail to implement the programs fully, resulting in decreased participation by students” (p.10). As a teacher in an urban school, I reflected on this statement. I faced several of the same challenges that were mentioned above. Most of my students lived in apartment complexes or subdivisions, so they had limited space at home for SAE projects. Also, many of my students were first generation Agricultural Education students and their parents did not express a lot of interest in their SAE projects or did not have extra time available to assist with projects at home. Community safety was a problem. Once, my students’ chicken projects were killed by a pack of dogs that

roamed the neighborhood. There were other times when people in the neighborhood would throw items in the sheep pens...resulting in the construction of a large fence around the animal area. Almost all of my students rode the bus one to two hours each way to school and either held after-school jobs or participated in sports and other extracurricular activities, so the idea of staying after school to work on an SAE project was unrealistic. As my school expanded, valuable land was being taken up by portable classrooms. So, how was I supposed to implement the SAE program fully? While focusing on the challenges of requiring each student to complete an SAE, I re-discovered some of the things that I did have in my program. I had a shade house and a greenhouse that were underutilized. This would be an excellent place for my students to get involved with horticulture projects. Promoting such projects can help efforts to engage each and every one of our students in an SAE project. The following steps can help sell agriculture students on the idea of horticulture SAEs, which can take place in almost any agriculture program.

1. Emphasize students’ investments in their futures.

Many of my students were from a low socioeconomic background, so they had to earn and save their own money to purchase the typical teenager things. My students were eager to share with me all the material things that they desired, such as new sneakers, a cell phone, or a car. To

capitalize on this opportunity, have students sit down and identify the actual cost of some of these items and then have them calculate an estimated amount of money that they could earn through horticulture SAEs. Examples like this help students understand that SAE is not just for a grade in their agriculture class, but serves as an investment in their futures! For instance, students can asexually propagate plants using division. Students make an initial investment of approximately \$3.00 in September to purchase a 4 inch potted plant. They can then divide this plant into four equal parts each month. By February, they will have 256 plants that can be sold at \$3.00 each. Using this strategy, a student could earn almost \$600 in five months. Such a project is great for students because it requires limited financial and time investment. Students can get started on their project with an investment of only \$3.00 and could care for their plants prior to the start of school, at lunch, or a designated SAE day every other week.

Plants that can be easily propagated through division

Ground Covers

Irish Moss (*Sagina subulata*)

Stonecrop (*Sedum* sp.)

Baby’s Tears (*Soleirolia soleirolia*)

Blue Star Creeper (*Pratia pedunculata*)

Woolly Thyme (*Thymus pseudolanuginosus*)

Building the Pipeline *– Diversity in Agricultural Education through* *Junior MANRRS.*

by Jewel Moore, guest author

It's often said that agriculture "is a dying field;" "young people aren't interested;" "it's not a lucrative career;" "it's hard to find good candidates from diverse backgrounds." Have we ever asked ourselves why this is? How can agriculture be a dying field if we eat and wear clothes everyday?

Cow, Sows, and Plows? How about Fashion & Apparel? Human Nutrition? Environment? Hospitality? Technology? Agri-business? Research, Law Enforcement, LEADERSHIP?

Through the National Society for Minorities in Agriculture, Natural Resources, and Related Sciences (MANRRS), we are changing the face of agriculture by linking hands around the world and building the pipeline to agriculture through Junior MANRRS chapters established across the country.

Jr. MANRRS is one of the cornerstones of the National Society for MANRRS. Its lasting success is anchored in how our young students are exposed and cultivated at a critical point in their educational matriculation (upon entering high school). Junior MANRRS is a pre-collegiate outreach program initiative of the National Society for MANRRS for urban high school-aged and younger students to expose them to career pathways, leadership, and educational possibilities in the food, agricultural, environmental,

and related sciences. As junior MANRRS members, students get the opportunity to attend local and regional workshops, and national conferences where they participate and compete in public speaking, poster research, written essay, and other contests. They also have the opportunity to interact with and see individuals who look just like them, as well as engage college students and industry leaders--seeing first hand, a future that is attainable.

Junior MANRRS members are affiliated with the National Society through membership with a local MANRRS chapter where they are prepared for leadership roles through mentoring, hands on applications, networking, and the free exchange of ideas. Through the National Society for MANRRS, we continuously reinforce the reality that diversity does exist

in agriculture and work hard to ensure our membership resembles the diversity in our country and the world around us.

Through Junior MANRRS we are building the bridges to success while securing the pipeline to a field of study that is full of adventure, excitement, wonder and endless possibilities, while at the same time planting the seeds of leadership and service to the communities in which we live. MANRRS continues to formally and informally engage our young people in understanding and appreciating the value of agriculture in our daily lives and the world. Are you willing to do the same? For more information on establishing a MANRRS or Junior MANRRS chapter visit our website at www.manrrs.org or contact MANRRS Executive Office at (901) 757-9700.





Jewel L. Moore served as MANRRS National President in 2006/2007. In her “other” job, Jewel is the Assistant Regional Inspector General for the USDA Office of Inspector General Northeast Region.

*Think about it!
Billye*



***Images used in this section courtesy of National MANRRS Office*

Elfin Thyme (*Thymus serpyllum*)
Corsican Mint (*Mentha requienii*)
Australian Violet (*Viola hederacea*)

Perennials

Yarrow (*Achillea* sp.)
Kenilworth Ivy (*Cymbalaria muralis*)
Day lily (*Hemerocallis* sp.)
Bearded Iris (*Iris germanica*)
'Platt's Black' (*Leptinella squalida*)
Society Garlic (*Tulbaghia violacea*)

Ornamental Grasses

Blue Fescue (*Festuca ovina glauca*)
Mondo Grass (*Ophiopogon japonicus*)
Fiber Optics (*Scirpus cernuus*)
Fountain Grass (*Pennisetum setaceum 'Rubrum'*)
New Zealand Flax (*Phormium tenax*)



2. Maximize SAE opportunities. Not only do horticulture SAEs provide students with awesome experience in plant production and marketing, such projects can also generate ideas for agriscience fair projects. Fertilizers, soils, planting, watering, use of growth regulators...these all provide opportunities for scientific investigation. Science project ideas that you may want to encourage your students to pursue could include (but are not limited!) to some of the following:

- Comparison of organic and inorganic fertilizers
- Importance of proper planting depth
- Comparison of watering techniques and watering frequency
- Use of beneficial insects compared to the use of insecticides
- Comparison between different types of bed preparation methods
- Use of traditional (sand, peatmoss, nitrified shavings) versus non-traditional soil amendments (worm castings, rice hulls, etc.)
- Effect of different plant spacings on productivity

3. Garden creatively! My freshman students were responsible for preparing, planting and maintaining one large garden plot of primarily leafy vegetables such as broccoli, cauliflower, collard greens, and lettuce. Dividing the large plot into smaller plots for individual students or smaller groups of students can help increase student ownership and interest in their garden plots. The use of signs to advertise which students are responsible for specific garden plots can help promote student pride and involvement. A sign might read, "This vegetable plot is professionally grown and maintained by Stephanie Dunlap, a student in Agriscience Foundations." If garden plots are not available, students can be assigned specific benches in the greenhouse for their individual or group horticulture projects. Also, students can be given the option to focus on a "theme" for their garden plots or greenhouse

space, based on planting season and climate zones. Some possible themes could be:

- Plants grown and used by different cultures
- Grow your own Caesar salad, zucchini bread, vegetable soup, pizza, salsa, etc.
- Herbs
- Flower gardens for cutting
- Native plants and wildflowers
- Plant identification specimens from the Floriculture CDE, Nursery/Landscape CDE, or Vegetable Crop Judging
- Succulent gardens
- Butterfly gardens

4. Market to the teachers, staff, parents and local community.

These individuals will probably be interested in purchasing fresh produce, houseplants, or flowers on a regular basis. As the holidays near, students can search the dollar store for inexpensive holiday containers to be used as pots. The dollar that a student invests in a festive container can have a financial return of several dollars. Farmers markets are becoming more popular and can be an excellent opportunity for the students to sell their plants or produce.



Photo compliments of Jack Elliot, University of Arizona

Additionally, students may be able to market horticulture products at community events or festivals. Horticulture SAEs provide students with many benefits. Students can be involved in the process from start to finish – from initially planting a seedling or making a cutting, to providing care and maintenance, to marketing and selling the finished product – in a relatively short amount of time. Best of all, many of the projects require a minimal financial investment and can be easily integrated into a variety of agriculture classes. I know from experience that it can become easy to list the reasons why all the students in your agriculture program do not have an SAE. The promotion of horticulture SAEs can help engage all students and sustain SAE as a viable component of Agricultural Education in urban schools, as well as in suburban and rural schools.

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Turning a Teacher's Aide Into an Agricultural Education Teacher

By Kim O'Byrne and Tom Dormody

If agricultural education is going to achieve 10,000 quality secondary programs by the year 2015, it will need to recruit and develop many new teachers. These teachers will replace those who will leave the profession and staff the estimated 4,000 new positions that will be added by the 10x15 initiative. Currently, the profession is experiencing a shortage in new agricultural education teachers. To end the shortage and achieve the increase in teachers stimulated by the 10x15 initiative, agricultural educators are challenged to think of new recruitment and development strategies.

For New Mexico, we conceptualized the "Agricultural Education Teaching Internship for Juniors and Seniors in High School" as one new tool for recruiting and developing new teachers. Juniors and seniors in high school commonly serve as teacher's aides for a unit of credit toward graduation. Our idea is for agricultural education teachers to identify talented students who have the interest and potential to become quality agricultural education teachers as their aides. In the internship program, their duties are structured and supervised/mentored by their

agricultural education teacher to give the interns a comprehensive look at and successful experiences with the role of agricultural education teacher. Interns get real experiences in all three components (classroom and laboratory instruction, FFA, and SAE) and strategies (partnerships, program marketing, professional growth, and community-based program planning) of Local Program Success.

Our idea is for agricultural education teachers to identify talented students who have the interest and potential to become quality agricultural education teachers as their aides.

Grading Rubric for College Credit

Upon entering college, the student receives college credit for their internship by submitting a portfolio. Our instructions and grading rubric for interns compiling and university faculty assessing internship portfolios for college credit are:

Juniors or Seniors in high school

who have expressed interest in agricultural education teaching as a career can receive New Mexico State University (NMSU) credit for AXED 100 (Introduction to Agricultural and Extension Education-3 credits) and AXED 230 (Early Field-Based Experience-1credit) for interning with their agricultural education teacher(s) while still in high school. To receive credit, they must register for AXED 100 and AXED 230 the fall of their first semester at NMSU. During the year of high school they are interning, students will develop a portfolio based on the Local Program Success model, containing the following tabbed sections and entries:

- 1. INSTRUCTION:** Under the supervision of their supervising teacher, interns will plan and teach at least two 50-minute lessons, and will develop the lesson plans and evaluation tools used for the lessons. Lessons may be selected from the NM Agriculture Curriculum Lesson Plan Library, LifeKnowledge™ curriculum, another curriculum used by the supervising teacher, or can be developed by the student following the NM Agriculture Curriculum Lesson Plan Library lesson plan format. (20 points)
- 2.FFA:** Interns will take a leadership role to facilitate the planning and implementation of two major FFA activities. They will provide all planning tools developed (e.g. POA

forms, calendars, etc) and utilized for the activities. Examples include facilitating the FFA chapter's participation in a fair, a leadership program, a CDE competition, State FFA Convention, and State FFA Camp. Include details of travel, food, and lodging arrangements, students attending, and any other pertinent information in this section. (20 Points)

3.SAE: Interns will report on at least two SAE visits made with their supervising teacher. Discuss the size, scope and condition of the SAE and the status of the record book in each report. (10 points)

4.PARTNERSHIPS AND COMMUNITY-BASED PROGRAM PLANNING:

Interns will document interaction with the agricultural education program's partners such as parents; school administrators, counselors, faculty, and staff; the advisory committee; the FFA alumni affiliate; local organizations, agencies, and businesses; etc., by providing agendas, sign-up sheets, or any other documentation of a meeting or event attended. Interns will discuss the role of partners in an agricultural education program with a short, half-page essay. (10 points)

5.MARKETING: Interns will be involved in planning and implementing one activity to market and promote the agricultural education program and/or the FFA chapter to encourage growth or support. Possible activities include coordinating Food for America presentations, developing or updating the program or FFA website, writing and distributing a program or FFA newsletter, making a presentation to the board of education or to parents at an open house, etc. (10 points)

6.PROFESSIONAL GROWTH:



Graphic adapted from photo courtesy of the University of Arizona

Interns will keep a weekly journal of their internship experiences. In this journal, interns will reflect critically upon what they have learned from each internship activity. They will reflect on what makes the role of the agricultural education teacher unique compared to the roles of other teachers. (20 points)

7.SCRAPBOOK: Interns will keep a scrapbook of programs, brochures, photographs, and other records of their participation in the internship program. (10 points)

8.SUPERVISING TEACHER'S EVALUATION: The supervising teacher will use the rubric below (for readers at <http://www.nmsu.edu/academics/axed/high-school-internship.html>) to evaluate the intern on their professionalism during the internship. (20 points)

Interns will turn in the completed portfolio to the Agricultural and Extension Education Department the first fall semester they attend NMSU and register for AXED 100

and AXED 230. The portfolio can be submitted any time during that semester up to the Monday of Finals Week. A grade will be assigned to the internship based on the points received in the portfolio assignment. The scale used for assigning grades to the portfolio and internship experience for AXED 100 credit is:

117-120 pts.	A+
111-116 pts.	A
108-110 pts.	A-
105-107 pts.	B+
99-104 pts.	B
96-98 pts.	B-
93-95 pts.	C+
87-92 pts.	C
84-86 pts.	C-
72- 83 pts.	D
<72 pts.	F

An intern receiving a C- or better on the above scale will also receive an S (Satisfactory) grade for AXED 230 which is graded S/U at NMSU. If you have any questions about this advanced credit program, please contact the Department of Agricultural and Extension

Benefits of the Program

The “Agricultural Education Teaching Internship for Juniors and Seniors in High School” has multiple winning aspects with no apparent downside. Some of these aspects are:

1. Agricultural education teachers get involved in building the teaching workforce.
2. Rich and meaningful experiences are provided to high school students with the interest and potential to become quality agricultural education teachers.
3. Agricultural education teachers get the satisfaction and experience of mentoring their own students toward a career in teaching agriculture.
4. Agricultural education teachers get more assistance with their program than a regular teacher’s aide could provide.
5. Students get a unit toward high school graduation and four credits towards their college education.
6. Partnership links between secondary schools, teachers, students, and university agricultural educators are established when the students are still in high school.
7. The most-motivated students start early on a pathway to become an agricultural education teacher.
8. Students could apply internship experiences

toward an advanced FFA degree and/or the Agricultural Education proficiency award.

9. Students enroll in a full load of courses their first semester in college, but in reality only attend four classes because they have already completed the work for four credits.
10. The program is simple to understand and requires little additional paperwork for the agricultural education teacher.
11. Additional costs for the internship should be minimal to non-existent.

Final Notes

Our next step is to work with New Mexico State University’s community college campuses to allow for concurrent enrollment credit for these interns as part of our new Associates of Science in Agriculture degree. This will give the students the credits on a college transcript while still in high school...and at the lower community college tuition rate. The Associate’s degree transfers seamlessly into our Agricultural and Extension Education major at New Mexico State University.

Although the program is new this year and we’re just starting to get teachers interested in piloting it with their students, we anticipate that it will be a success. Other states might be interested in adding such a program as a teacher recruitment and development tool. While we don’t anticipate that the program will completely solve the teacher shortage and demand for additional teachers as new agricultural education programs open under the 10x15 initiative, it could make a sizable contribution. Just think, if each current agricultural education teacher identified and worked with one student over the next three years in such an internship, we’d have the potential to add hundreds of new teachers to

the workforce with this simple tool, alone!



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Congratulations! You Got The Job... Now What?

By T. D. Fanning

From time to time we have opportunity to learn from the "Masters." I'm speaking of those individuals who compiled their wisdom over the course of years of successful educational experience. T. D. Fanning is one of those individuals and has agreed to share some of his wisdom in this issue. See if you can find any item you have never heard before. I think you will agree that sound advice is often timeless.

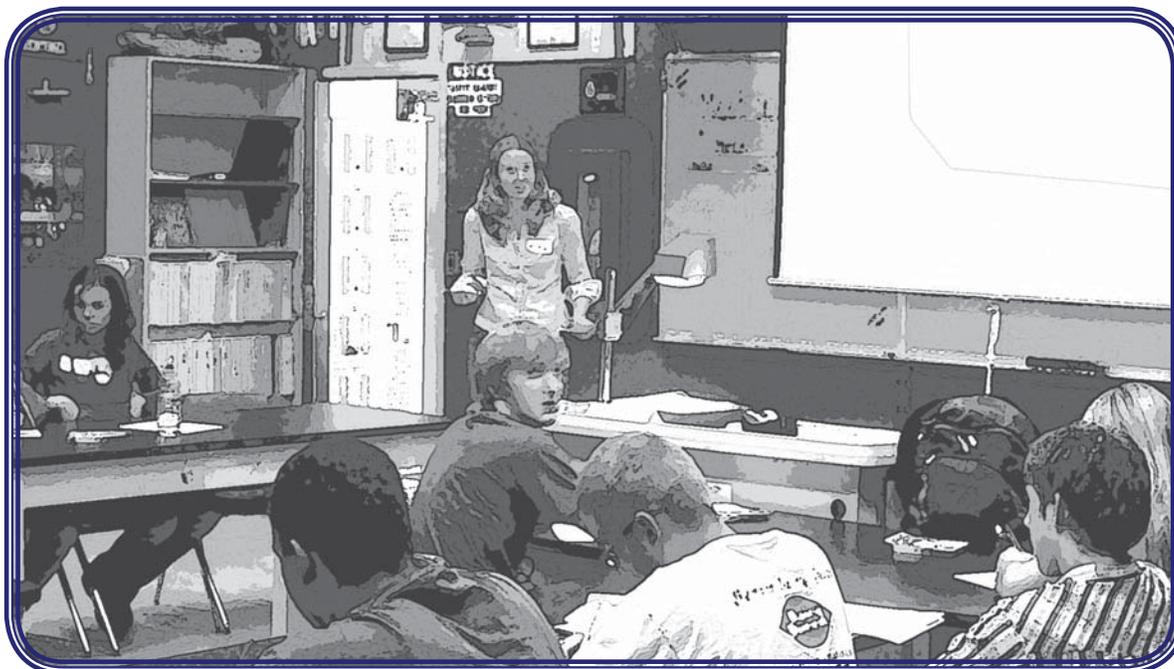
Congratulations, you are about to graduate from a prestigious institution of higher learning with a degree in secondary education. And, you have been hired for your first position of teaching agricultural education, vocational agriculture, agricultural science and industry, etc. Now what?

One of your first steps is to schedule a meeting with the building principal. Start off by asking him/her what he/she and the community expects from the agricultural education program. She/He may or may not have a valid answer for you depending on how much experience she/he has had with the previous program and how successful it had been. The principal may furnish you with good information or he/she may wax on with esoteric wanderings from which you will need to winnow out any bits of advice. At least you made a good first step by including the administration in your plans.

While you have the audience with the principal ask him/her to furnish

you with copies of the...

- school calendar for the next school year.
- ag/FFA planned activities.
- inventory of classroom supplies, resources, etc.
- inventory of mechanics laboratory equipment.
- schedule of classes.
- names of FFA officers, their postal addresses, phone numbers, and email addresses.
- last year's curriculum for each ag class. (You will need to talk with students who were in those classes to check the validity as to content. Sometimes what was on paper in the principal's office is not what actually occurred.)
- pre-enrollment information for each class.



Graphic adapted from photo courtesy of the University of Arizona

- amount of financial support available in normal budget and weighted monies.
- dates and deadlines for requisitions of new materials you might need to order.
- names and contact information of the agricultural advisory council.
- names and positions of certified and non-certified staff associated with the school.
- last year's FFA program of activities.
- forms and procedural information associated with the school. (You will probably receive these during a teacher in-service meeting before the start of school, but ask anyway.)
- procedures to be followed and administration support with discipline.
- transportation supplied by the school district for program supervision.
- keys to your new kingdom.

It would be prudent of you to have the information you need written in hardcopy form to present to the principal. This could prevent misunderstandings at a later date as to exactly what you had requested. The principal could/will be overwhelmed by your request and may not be able to furnish you with all of the information you need, but they may direct you to reliable sources.

If the teacher you are replacing is retiring or moving on to a different opportunity, you will want to meet with him/her and review the information you received from the principal. In fact, this person may take you around and introduce you to those people you were asking about and other key resource people in the community, thereby saving you considerable time and giving you an accelerated start.

Now that you have your basic information, get your master calendar out and mark the dates you must make commitments to, such as state ag teachers meetings, FFA officers training sessions, state FFA Convention, county fair, etc. This list will vary with the situation in which you find yourself.

Take the balance of the information you have and analyze it against the conditions that actually exist. Then prioritize your action list. No one can tell you the proper order to implement action; that is governed by your local set of circumstances. But remember, if you do not have your curriculum planned and your lesson plans organized by the time school starts, the rest is for naught.

OTHER RANDOM THOUGHTS...

Now, some random thoughts in no particular order as you go about your first year.

Make sure that when you make changes in the curriculum or the physical environment of your facility, you do so for improvement, not just for a change or to prove that you are "the new sheriff in town." On one of our Mission Valley FFA week long Spring Educational Agricultural Study tours we visited a three teacher department in Missouri. One of them was a new grad-

uate replacing a successful teacher who retired. During the tour he told my students and me that the first thing he did was to throw away all of the reference books and materials the former teacher had developed. The female sponsor I had with me on the tour, a mother of

one of my students, was an executive in a large corporation in the area where I taught. Her reaction to that statement was, "Arrogant little bastard isn't he?" The limited reach of your experience and learning might be a hindrance to your understanding.

If you truly want to be considered a professional, you need to:

(1) become an active member in your professional organizations. An entire article could be written on this alone.

(2) strive to be a professional in appearance.

Granted, your appearance will fit the occasion when in the mechanics laboratory, on a field trip, or when making supervised visitations. In the classroom situation or school gathering, try not to appear as if you are going to participate in a "goat roping" or an athletic activity.

(3) remember that you are a professional 24/7. As a former student of mine reminded me, "You never know when a teaching opportunity will present itself."

Don't just plan to teach what you know--plan to learn. I had an out-

*Take the
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Then prioritize
your action list.*

standing teacher trainer tell me that he had a former student call him in a panic. It was November and the student said he had taught his students everything he knew and wanted to be advised as to what to do. Even as a college graduate you are not prepared for everything you need to teach. You will continue to learn every day of your life, or at least you had better!

Don't be too proud to ask for help. Reach out to:

- area agricultural instructors.
- your agricultural advisory council.
- the agricultural instructor you are replacing, if they were successful.
- community resource people. I have discovered that you can develop a stronger unit if you allow community patrons to have "buy in" by incorporating them into various phases of your program.
- your college teacher trainers and student colleagues.
- other established teachers in the school. You might get new insight on actual discipline and administrative support.

Plan to teach in complete blocks of subject matter, not just "peek-a-boos" or a little at various levels.

Insure that you include student motivation at the beginning of each lesson or teaching block. They need to realize why what you are about to share will be important to them.

Don't be too proud to say you don't know something. But instead, "I will research it and get back to you." And then do it.

Make a monthly summer report of your daily activities as an educator to your principal and ask him/her

to have it placed in the monthly packet of each board member. Most of you will be on an extended contract and the board must be apprised as to why this is necessary. This is a good approach to gaining support, and remember, "Many high school agricultural programs are only one teacher away from extinction."

Like it or not, you will be a role model for your students. Be a positive role model! You are molding and developing individuals, not just agricultural students. They will be individuals long after they cease being your students.

Become involved in community activities, but don't necessarily join everything.

Don't waste your time criticizing or demonizing the teacher you are replacing. IF you do make improvements, patrons, members of the educational community, parents, and students will know. "You do not make yourself larger by cutting others down."

Carry out your organizing, planning, work, and teaching as if you are a small business owner getting started, not a school district employee.

Forget about the 8:00 to 5:00 approach! A small business owner will put in the effort and time, whatever it takes, to make their business a success. Shouldn't you?

T. D. Fanning taught agricultural education for 41 years at the high school level and served a two term school board membership at the same school where he taught.

Principal Findings from the Executive Summary of Understanding Agriculture 1988

- Agricultural education in U. S. high schools usually does not extend beyond the offering of a vocational agriculture program.
- For many years, vocational agriculture programs have had a positive effect on tens of thousands of people: students, their families, and residents of local communities.
- White males have mainly made up enrollment in vocational agriculture programs in the past and continue to do so.
- Much of the focus and content of many vocational agriculture programs is outdated.
- Vocational agriculture programs are uneven in quality.
- Vocational agriculture programs in secondary schools are currently conducted as part of the federal and state systems of vocational education.

Principal Conclusions and Recommendations

- The focus of agricultural education must change.
- Beginning in kindergarten and continuing through twelfth grade, all students should receive some systematic instruction about agriculture.
- The success of reform in vocational agriculture programs relies on innovative

Quizzical Reflections

By Billye Foster

programmatic leadership at the state and national levels.

- Major revisions are needed within agricultural education.
- The quality of vocational agriculture programs must be enhanced, in some cases substantially.
- The establishment of specialized magnet high schools for the agricultural sciences in major urban and suburban areas should be encouraged.
- Teachers should seek out and share high-quality computer software and instructional materials and media for agricultural management and planning and for instructional application.
- As a goal, all students enrolled in vocational agriculture programs should participate in worthwhile SOEs.
- The FFA should change its name and revise its symbols, rituals, contests, awards, and requirements for membership consistent with all applicable federal and state laws to reflect a contemporary image of agriculture and a broadened and improved agricultural education program.

*The above findings and recommendations were taken from **Understanding Agriculture, New Directions for Education**, National Research Council, National Academy Press, Washington, D.C., 1988.*

As mentioned at the beginning of this issue, I recently had opportunity to hear Dr. Robert Warmbrod reflect on his experience of helping develop the report that later became the infamous “*Green Book*.” In the mid-1980s, the National Research Council began a project designed to review the value of Agricultural Education in secondary schools. This was accomplished by assessing the contributions of instruction in agriculture to the maintenance and improvement of U. S. agricultural productivity and economic competitiveness. ***Understanding Agriculture: New Directions for Education***, has had both interesting and profound effects on our profession.

First reflections, while thumbing through “The Green Book,” caused me to wonder, “*what did the profession really look like then?*” Although I began my own teaching career in 1977, I confess I’ve slept since then and those memories are hazy. It was then I realized I had the answer right within my reach—back issues of *The Agricultural Education Magazine*! No other set of manuscripts provides us with the pulse of the practice and evolution of Agricultural Education than this publication.

So began the systematic grouping and searching of past issues of *The Agricultural Education Magazine* from January 1985 to December 1987. I chose these issues

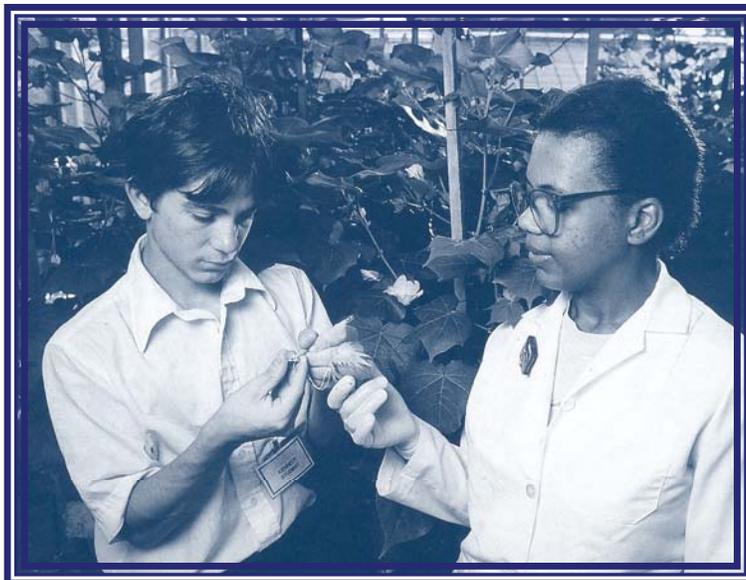
because Dr. Warmbrod noted the committee was first formed in 1985. The final report was published in 1988. These three years should provide a snapshot of what the profession was like at the time of the evaluation.

What did I discover?

Carefully recording the themes and articles published in those past issues showed the two different editors during that window of time had produced 36 issues of the magazine. **Not** counting the editor’s comments, there were 357 articles published from January 1985 until December of 1987. Written by 845 authors, these articles discussed the following themes:

- January 1985 Theme: **International Agricultural Education**
- February 1985 Theme: **Vocational Agriculture and the Handicapped Student**
- March 1985 Theme: **Innovative Student Management Strategies**
- April 1985 Theme: **Using Microcomputers in Agricultural Education**
- May 1985 Theme: **FFA Conventions and Contests**
- June 1985 Theme: **The Supervisor: Local, State and National**
- July 1985 Theme: **Planning, Organization and Time Management**

- August 1985 Theme: **Evaluation of Vocational Agriculture**
- September 1985 Theme: **The Teacher of Vocational Agriculture**
- October 1985 Theme: **Elementary and Pre-Vocational Programs**
- November 1985 Theme: **Teaching Tips**
- December 1985 Theme: **Future Programs of Agricultural Education**
- January 1986 Theme: **Vocational Agriculture and the Excellence Movement**
- February 1986 Theme: **Staying Current—Agricultural Mechanics**
- March 1986 Theme: **Staying Current—Agricultural Business and Farm Management**
- April 1986 Theme: **Staying Current--Crop and Food Production**
- May 1986 Theme: **Staying Current—Forestry and Natural Resources**
- June 1986 Theme: **Staying Current in Animal Agriculture**
- July 1986 Theme: **Staying Current—Classroom and Laboratory Management**
- August 1986 Theme: **Staying Current: Youth Organizations**
- September 1986 Theme: **Staying Current with High Technology**



Cover photo from Volume 78, Issue 6--May/June 2006

- October 1986 Theme: **Staying Current—Small Animals and Specialty Crops**
- November 1986 Theme: **Staying Current—Professional Affairs**
- December 1986 Theme: **Staying Current—Horticulture**
- January 1987 Theme: **Balancing Your Professional and Personal Life**
- February 1987 Theme:

Smith-Hughes at 70

- March 1987 Theme: **Agriculture in a Global Perspective**
- April 1987 Theme: **Women in Agricultural Education**
- May 1987 Theme: **Teaching the Basics**
- June 1987 Theme: **Agricultural Education in the Political Process**
- July 1987 Theme: **Coping with**

Declining Enrollments

- August 1987 Theme: **Agricultural Opportunities for Rural Nonfarm Students**
- September 1987 Theme: **Recognizing Excellence in Teaching**
- October 1987 Theme: **The Future of Agricultural Education in Secondary Schools**
- November 1987 Theme: **Enhancing School and Community Relationship**
- December 1987 Theme: **Serving Minority Groups**

Of the 845 authors, 61 were women, 19 were minorities, and 71 were actual secondary level agricultural education teachers at the time the article was printed. Those numbers roughly equate to the following percentages:

- 7% female
- 8% Agricultural Education teachers
- less than 1% minority.

This made me pause because this was one of the points noted in the study:

“White males have mainly made up enrollment in vocational agriculture programs in the past and continue to do so.

During the past decade, the enrollment of females has increased.



Cover photo from Volume 59, Number 1--July, 1986

Female enrollment has concentrated in a limited number of specialized vocational agriculture programs. Enrollment of minorities in vocational agriculture programs is disproportionately low” (National Research Council, pg. 3).

How would we look today?

In the past 36 months (May/June 2005 until May/June 2008), there have been only 19 issues, as reflected from the now bi-monthly publication standard. Within those 19 issues were 193 articles. Forty-seven percent of the 242 authors were women, 19% were minorities, and 12% were teachers at the time the articles were published. *Would the members of the National Council’s Committee on Secondary Ag-*



Cover photo from Volume 79, Issue 5, March/April 2007

ricultural Education think we have improved?

Perhaps the numbers look somewhat better in this single category, but we all know there is much more to the story. How about our curriculum? What about the students enrolled in the secondary level programs? And, then there is the issue of Ag Literacy--have we success-

fully implemented K through 12 programs in Agricultural Literacy?

Below are the list of themes from May/June 2005 to May/June 2008, do they seem to be more on target?

- May/June 2005 Theme: **The Art of Teaching**
- July/August 2005 Theme: **The Assessment of Teaching and Learning**
- September/October 2005 Theme: **Resources in Teaching**
- November/December 2005 Theme: **Experiential Learning**
- January/February 2006 Theme: **Motivating Students to Learning**
- March/April 2006 Theme: **Developing Students for Careers**
- May/June 2006 Theme: **Thinking Critically**
- July/August 2006 Theme: **Enhancing Diversity**
- September/October 2006 Theme: **Development Professionals**
- November/December 2006 Theme: **Reflections and the Future**
- January/February 2007 Theme: **The World is Flattening—Will Agricultural Education Still Fit?**
- March/April 2007 Theme: **The la joie de faire of Teaching—Why We Do What We Do**
- May/June 2007 Theme: **Research is to Practitioners,**



Cover photo from Volume 59, Number 6--December, 1986

as Logic is to _____.

- July/August 2007 Theme: **“See Me—See you”—well, not always...Dealing with Differences**
- September/October 2007 Theme: **“Eenie, Meanie, Minie, Moe...Pick the Curriculum that best fits Joe!”**
- November/December 2007 Theme: **“If reality is illusion, where does Agricultural Education fit?” Words of Wisdom**
- January/February 2008 Theme: **How Can we ensure a future for Agricultural Education?**
- March/April 2008 Theme: **What do you say to students considering a career in Agricultural Education?**
- May/June 2008 Theme: **Problem Solving or Appreciative Inquiry—Which is Best?**

The challenge facing us all is one of reflection and planning. But that alone will not help us achieve the lofty goals set in 1988--to achieve those goals, we need leaders in our profession willing to implement such plans that are built upon those original goals.

Are we up to the task?

