



West Virginia

AGED NEWS and VIEWS

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A New Beginning

by Harry N. Boone, Jr.

It's January 2009 and change is all around us. A few days ago we welcomed the year 2009. In a few days we will inaugurate the forty-fourth president of the United States. We will also see some level of change in each of the national and state legislative bodies. Change is the one constant we can expect in our lives. I am sure that you are experiencing some level of change in your personal life.

Agricultural education in West Virginia is also undergoing some major changes. Over the past twelve to eighteen months, key members of the profession have been working diligently to update agricultural education's content standards and objectives (CSOs). We have seen renewed emphasis placed on program completers. We have also seen a move from end-of-course tests to end of program performance tests. How you react to these changes will dictate your program's success and longevity. I have some suggestions on how to deal with the change.

If you have not already done so in the past five months, now is the time to review and revise your course of instruction. As you prepare for this process there are a few basic concepts you must keep in mind.

Conduct a Community Survey

When was the last time you completed a community survey? Personal observations from living and working in a community are one way to determine the scope of the agricultural industry and the needs of the local community. We should always use more than one method to establish the needs of the community. One place to start is the U.S. Census data. Go to <http://www.nass.usda.gov/census/census02/volume1/index2.htm> and explore the official agricultural statistics for your county and/or state. Use the local phone book to re-

view the agribusinesses in the area. If you want to do this electronically, try a site such as <http://switchboard.com/>. Don't forget to involve your advisory committee in this process as well. The first step in revising your course of instruction is the completion of a needs assessment through a good community survey.

Educational Philosophy

Your educational philosophy affects the content of your courses as well as the way you deliver them. As you examine your course of instruction, you should also review your personal philosophy of agriculture, teaching, and agricultural education. Take a few minutes and put your beliefs in writing.

Departmental Objectives

Have you established short-term and long-term goals for your program? You need to start with an overall program objective that addresses the knowledge and skills your students will obtain and how they will use these abilities as they leave your program and move into a career and/or advanced education. I think that you should also have secondary goals such as 100% first year members earn the greenhand degree, submit at least one state application for each proficiency award, etc.

Course Content

For the course content you will want to start with the courses required for your area(s) of concentration. Review the content standards and objectives and develop a list of units that you will need to teach these skills. As you develop the units needed to deliver the CSOs, keep the following in mind:

- Approximately 60% of the instruction will be based on the CSOs. The remaining 40%

of your instruction should be based on the needs of your students and the local community.

- All courses (with a few exceptions) will have an agricultural mechanics component.
- All courses should have a leadership component. This leadership component should be completed through the FFA and all students should be active members of the FFA.
- All courses should have SAE and recordkeeping components. Your students cannot be a program completer without an SAE. You need to address ways to expand SAEs and the use of records as a part of every course.
- Every course needs a career component. It is your role as a teacher to provide the stimulus for students to explore the many careers available in the world of agriculture.
- Your instruction should be SAE driven. Instead of a unit on breeds of livestock, try incorporating the content into a SAE based unit. As you get your students enthused about raising market hogs, incorporate information on the major breeds of swine, discuss their digestive systems, and have students explore the nutritional requirements. By showing students how these components are an integral part of a topic they are interested in, you will solve many of your motivational problems.

Changes in agricultural education in West Virginia are here. The way you deal with the changes will determine the success of your program. If you look at the changes as a way to improve and expand your program, your students will benefit. You will be more content in your choice of a profession. The decision is yours. Will the changes of 2008-2009 mark a new beginning for you and your program?

Editorial: Thank You

by Harry N. Boone, Jr.

Thank You

Over the past eight years the agricultural education profession has honored me with three distinguished awards. I received the Honorary American FFA degree in 2002. In 2007 I was presented with the West Virginia Southern States Cooperative Agricultural Leadership Award. In October I was one of thirteen individuals to receive the National FFA Organization's VIP Citation. I am deeply honored to receive these awards and would like to publicly thank the profession for these recognitions. Thanks to the agricultural education teachers, WVAAE officers, the WV FFA Executive Committee, and the WV Department of Education staff. Thank you for recommending me for these honors and giving me the opportunity to serve a profession that I love and have devoted much of my life.

Suggested CDE Registration Procedures

In the last issue I presented some thoughts on the 2008 WV Career Development Events. At that time I reported that the Program and Policy Committee had taken a strong stance on late entries (\$100 entry fee per contest for late entries). As a result I propose the following timeline for contest entries for 2009.

Equine Contest

Apr 15 4:00 p.m. Registration deadline
Apr 16 4:00 p.m. Email registration confirmation sent by AGEE

Apr 17 10:00 a.m. Event registration posted on AGEE web site
Apr 17 4:00 p.m. Deadline for correction of registration errors
Apr 25 Equine event

Dairy Cattle Contest

Aug 5 4:00 p.m. Registration deadline
Aug 6 4:00 p.m. Email registration confirmation sent by AGEE
Aug 7 10:00 a.m. Event registration posted on AGEE web site
Aug 7 4:00 p.m. Deadline for correction of registration errors
Aug 16 Dairy cattle event

September Events

Sep 11 4:00 p.m. Registration deadline
Sep 14 4:00 p.m. Email registration confirmation sent by AGEE
Sep 15 10:00 a.m. Event registration posted on AGEE web site
Sep 15 4:00 p.m. Deadline for correction of registration errors
Sep 22-24 September events

To summarize, I propose the following: You will send your registration forms (typed preferred) to AGEE by the deadline. Within 24 hours of receiving your registration materials, Alice Compton will send you an email message stating that the materials have been received. **IF YOU DO NOT RECEIVE AN EMAIL CONFORMATION WITHIN 24 HOURS, PLEASE CALL THE AGEE OF-**

Potential AGEE Summer Offerings

AGEE 693 SPTP: Innovative SAEs, (1cr). An exploration of alternative experiential learning opportunities available in agricultural education. Emphasis will be places on research and exploratory supervised agricultural experience programs (SAEs). *Instructor:* Harry Boone *Date:* TBA

AGEE 693 SPTP: Advanced Excel Techniques, (1cr). A study of formulas and other advanced techniques in Excel. The course will explore many formulas useful in farm accounting including interest and depreciation schedules. *Instructor:* Harry Boone *Date:* TBA

AGEE 693 SPTP: Professional Relationships in Agricultural Education, (1cr). An agricultural education teacher is one of a number of agriculture professional in a local community. The course will explore how an agricultural education teacher should establish and nurture relationships with other professionals. *Instructor:* Harry Boone *Date:* TBA

AGEE 693 or 930 SPTP: Agriculture in the Classroom, (3cr). Agriculture in the classroom focuses on ways to incorporate agriculture related topics into existing classroom curriculum including classroom discussions, readings and hands on activities. New ways to introduce students to agricultural topics while they explore and learn about math, reading, social studies and science will be presented. *Instructor:* Deborah Boone *Date:* June 18-19, 2009

AGEE 693 SPTP: Ag Teacher Travel Course, (3cr). *Instructor:* Stacy Gartin *Date:* TBA

Aquaculture, (?cr). A seminar for teachers starting an aquaculture program or improving the production, maintenance and results of existing program. If you are intersted please contact Dr. Dan Miller (dmille31@wvu.edu). Funding may be available for this idea if there is sufficient interest from the teachers. *Instructor:* Dan Miller *Date:* TBA

FICE AND VERIFY YOUR REGISTRATION. Once Alice enters the information, I will post a registration list on the AGEE website. I will also send an email on the list serve informing you the list has been posted. You will have six hours to check the lists and report any discrepancies.

Please send your comments on these suggested procedures. Is it a problem to publish the students' names on the Internet? (The names are published in the results that are posted on the Internet.)

Summer Courses

Below you will find a tentative list of four summer courses. I plan to offer three one day (one hour) courses during the summer of 2009. I plan to offer the courses in three different areas of the state. The "Innovative SAEs" is a repeat of the workshop that I delivered last summer. If you have any special topics for the "Excel" workshop, please let me know. I plan to focus on the formulas/calculations available in Excel.

Although a number of agricultural education teachers have taken the course, Dr. Deborah Boone's "Agriculture in the Classroom" is designed more for elementary teachers. The course shows teachers how to incorporate agriculture examples in their classroom curriculum.

The opinions expressed are those of the editor and do not necessarily represent official positions and/or opinions of the Agricultural and Extension Education program, the Davis College of Agriculture, Forestry, and Consumer Sciences, or West Virginia University.

Dr. Douglas LaVergne Joins the AGEE Faculty

Dr. Douglas D. LaVergne joined the Agricultural and Extension Education faculty at West Virginia University on January 5, 2009. Dr. LaVergne completed his Doctor of Philosophy degree in December from Texas A&M University. While working on his degree at Texas A&M he served as a graduate teaching assistant in the Department of Leadership, Education, and Communications.

Dr. LaVergne's educational background includes a Master of Science de-

gree from the University of Arkansas - Fayetteville and a Bachelor of Science degree from Southern University A&M College in Baton Rouge, LA. His educational experiences include developing a new agriculture program at Morgan City High School, Morgan City, LA.

Dr. LaVergne will be responsible for teaching the agricultural mechanics courses in AGEE. Additional responsibilities may be added as the Department evaluates its current offerings against the strengths of its faculty.



Field Experience Reflections: The Book of Life by *Jeremy Kelly*

Open chapter...

Standing outside all alone, afraid of what is to come; I nervously swallow my fears and open the door. You would think at my age (24 years) the first day of school would be nothing but an everyday occurrence. I am taken back to the days when you first walk into a classroom and everyone is looking at you with awed gazes and your every move and expressions are critically evaluated. This marks the beginning of a chapter, a chapter that I have been patiently waiting for throughout many years. Now that it was upon me, I debate its relevance in my life.

In that, I have debated for many months the reasoning behind this choice to pursue a teaching career. My first weeks at Cameron High School confirmed my

worst nightmare; I did not want to be a teacher. I could not understand why these teachers felt or had this need to stay so late in the afternoon to help these students who seemed not to care at all. I could not figure out why Mr. Dotson and Mr. Smith would put so much stress upon themselves to organize and take on responsibilities of fundraisers that would enable them to take trips which would then add more time and stress on themselves.

Taking over my first class I realized the differences in student abilities that I faced. Some of the students were highly developed and quickly understood what I was talking about. At the same time students that weren't as quick looked confused. The next day I revamped my lessons, but so did the response to my teaching method. Now the reversal occurred and the highly developed

looked at me with painful eyes of boredom. It was then that I realized that it was my responsibility to create lessons that would enhance all levels of abilities. This of course took more time.

There was an overwhelming feeling that I was unsure of what I was doing. In previous chapters of my life there was always someone there that would tell me what I was supposed to be doing. Yes, I was given advice but for the most part what I did in the classroom was strictly up to me. This kind of responsibility was truly overwhelming, but yet enlightening when I was able to take on more and more and was able to handle it with ease. In the beginning the overwhelming feeling of still being a student would emerge. This would often throw me off of course thinking that I was not in a position to tell

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HERE BY THE OWL

This year the West Virginia FFA Foundation is working to start a scholarship for FFA members who are seeking a career to become an agriculture education teacher and FFA advisor. FFA students are quick to thank parents, grandparents, and others who help mentor, guide and inspire their success in life and desire for agriculture. We recognize winning crop yields but rarely the soil. We are asking individuals and businesses to make a donation to honor a past or present agriculture teacher, the soil, who has influenced your successful life. This donation can be any financial amount. A \$50.00 donation on behalf of an Agriculture Education Teacher would greatly be appreciated. The foundation wants to present the first Agricultural Education Teacher's Scholarship at the State FFA Convention in July of 2009.

The WV FFA Foundation was established to provide financial assistance to WV FFA members through scholarships, awards and travel assistance to National events. This financial assistance is provided by funds generated by interest from the Foundation funds. A gift to the WV FFA Foundation is a donation, which keeps helping WV FFA members "forever", because the foundation only makes awards from interest generated each year.

Please send your donation and name of honoree to: WV FFA Foundation
c/o William C. West
210 West Street
Ripley, WV 25271

Thank you for being a WV FFA Foundation supporter.

Field Experience Reflections: Dept. of Environmental Protection

by Sarah Hopkins

In May of 2005, I was employed as an intern with the West Virginia Department of Environmental Protection (WVDEP) in the Division of Water and Waste Management. I was assigned to review reports submitted by maintenance contractors on home aeration units (HAU). My primary task for the summer was to create a database using Microsoft Access that would log submitted reports allowing anyone at the office the leisure of looking up numerous reports without digging through potentially hundreds of paper files. I enjoyed taking on the challenge to create a database with Microsoft Access, but once that task was complete my daily duties changed dramatically. Much of my work became clerical duties such as filing papers, preparing mass mailings, sorting papers, and entering records into the computer.

Fieldwork was one aspect of the job I greatly enjoyed and anticipated. My first fieldwork experience was a trip to the Pilgrim's Pride poultry processing plant in Moorefield, WV. I spent several hours with an environmental enforcement officer moni-

toring local agricultural areas. He informed me of common problems he watched for such as farmers feeding animals too close to streams or unrestricted stream crossings. One stop on the trip was at a fish hatchery in the eastern panhandle. There I learned how much care was taken to monitor water quality for the health of the fish as well as for the environment. Overall, the trip was very informative. It allowed me to easily associate agricultural production with environmental protection while teaching me many facts from both areas.

During my second summer with the WVDEP, I again had the opportunity to partake in some fieldwork. Having primarily dealt with HAUs by reviewing reports for a large part of my internship, my supervisor gave me the opportunity to work with the units hands on. I accompanied an environmental enforcement officer inspecting units receiving failing reports and targeting individuals refusing to pay required fees to operate the units. As you can anticipate, individuals will not be very joyful when you are approaching them to inform

them they are in violation of the law. Fortunately we never had anyone become too angry at our presence; however, a few were obviously not pleased.

In my third summer, I again had the opportunity to enjoy some fieldwork. This experience was fun as well as educational. I accompanied a group of water quality specialists to various waterways throughout southern regions of the state. Our goal for the trip was to locate areas where agricultural production was apparent and test the water quality of the streams surrounding the site. We looked for areas downstream of livestock which had access to a stream. We tested the flow of the stream and also collected samples to return to the water quality lab for testing. I enjoyed this experience and have considered a similar occupation as a career.

The fourth and final summer with the WVDEP also involved a field experience opportunity. I was able to coordinate and assist teaching a stream monitoring workshop

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Field Experience Reflections: Teaching Assistant for FDST 365 and 367

by Gail Nesselrod

While dining with two friends at BW3's in Morgantown a while ago, I noticed the price they were paying for just a handful of chicken wings. I began to think about how the price to harvest the whole chicken was less than my friends were paying for just the wings. As our dinner conversation continued, I told them what I had learned in FDST 365 and 367 less than a year ago. I had learned that the wings on a chicken were considered waste and there was only enough meat on them to price them at .02 to .07 cents per wing. They were paying at least .35 cents to .50 cents per wing with Bar-B-Q sauce on them. We could buy a whole chicken for less than \$5.00 and process it cheaper. I soon started to analyze the price of all meats that I was buying in stores.

Once I began to realize the high demand for meats, I started paying close attention to the harvesting techniques. This was my third semester assisting Dr. P. Brett Kenney in the meats laboratory. While working under the direction of Dr. Kenney, he not only

taught the new students about meat technology but he refreshed my skills. There were graduate and undergraduate students that had some to no experience with the harvesting of animals for meat consumption. We were able to process meat products in the new laboratory facility.

While assisting with different meat processing, I could see the preferences in the students' eyes. Some students would rather work by themselves and others would rather work as a group. We harvested lambs at Preston County High School at the slaughter facility and processed all meat products at the university meats laboratory. When we harvested lambs, I could tell that it would have to take a special person to harvest the animals. I knew that job wasn't for me.

As a part of the courses we processed chicken, swine, beef, lamb, and fish. We also cured meats and made sausages with some products for testing. One of the cured

meats was the hams from the hogs. We trimmed and cured them like West Virginia FFA Ham, Bacon, and Eggs participants. This was very informative for the students looking to become agricultural education teachers in areas that sponsored the Ham, Bacon, and Eggs shows. We learned about microbiology and radiation in meats during the laboratory.

Students in the meats classes helped with the West Virginia FFA Meats Career Development Event. We processed and packaged most of the cuts for the contest. We also served as team leaders for the contest. We not only saw the excitement in Dr. Kenney's eyes during preparation but also felt it personally when it was review time. We were just as excited when we could all identify the cuts as well as the carcass evaluations. We also learned how to rib and yield grade beef carcasses. Many of us suggested the revival of the meat judging team from

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Field Experience Reflections: The Book of Life (continued)

these students what to do; after all I was a student myself: right?

At some point in my journey to self determination I was hit by this amazing feeling. I can almost pin-point the time. It was after school and the students that Mr. Smith had trained returned from their competition with a second place award. The girls were so excited they were almost screaming. I saw how proud Mr. Smith was, I knew that the girls were proud of themselves, and I also had this overwhelming feeling of happiness for them. It was so rewarding to see all of their hard work pay off. It made me feel good, and I had nothing to do with it. I was just an observer.

I walked into class the very next day and it happened. The students walked right

past Mr. Dotson (not even acknowledging his existence) to ask me if they could go somewhere, or go to the restroom, or whatever; it didn't matter. They came to me. There was a change that came across me. I understand now why these two spend so much of their time and energy into developing this chapter into what it is. The true payment that an agriculture teacher receives isn't of monetary gain, but of emotional satisfaction that they have truly impacted a student's life. These moments when students run into class excited about something that you have done, the chicks hatching, or excited to tell you about something that they did the night before, is truly an experience that keeps the teacher moving on. I know that it did for me.

As this comes to a close and my fingers find the last keys in this, my reflection, I

can't help but think back on this short chapter in my life. I have always thought that chapters close and then open, leaving the contents in the previous chapter. I am wrong. Even though this has been a quick chapter, the people and the experiences I have dealt with will forever flow freely into the next chapter of my life. I want to thank Dr. Debby Boone, Dr. Harry Boone, Dr. Stacy Gartin, Mr. Russell Dotson, Mr. John Smith and the dynamic students at Cameron High School that have put me back on the track to a lifetime of happiness. You will never truly know the impact you have had on me. Thank You!

... End Chapter

Open Chapter ...

Field Experience Reflections: Dept. of Environmental Protection (continued)

to the other interns within the WVDEP. The workshop was very informative for me and I was pleased to have the opportunity to encourage and serve as an example to the other interns.

Over the course of the past four summers, my primary duty as an intern has been to monitor reports submitted for Home Aeration Units. Clerical duties of filing, prepar-

ing paperwork, and repetitive data entry into the computer accompanied the internship. The strong bonds I have formed with my supervisor, coworkers, and fellow interns have been enough encouragement to keep me employed with the WV Department of Environmental Protection for the duration of my undergraduate experience. While I do not hold onto the days spent in the office, fieldwork opportunities have been very

memorable experiences. I am very appreciative for all the knowledge and experience I have acquired throughout my internship. I found myself being continuously thrilled to make the connection between agricultural production and environmental protection. Overall, I have enjoyed the time spent with the WVDEP, learning and growing throughout the summers.

Field Experience Reflections: Teaching Assistant for FDST 365 (continued)

previous years at the university but that suggestion will take more time.

I had the opportunity to present a lecture on meat microbiology. I covered contamination from pre-harvest to post-harvest. We discussed microorganisms in meat like; viruses, molds, yeasts, and bacteria. We learned about the growth curve and the phases of microorganisms. We viewed the factors affecting microbial activity in meat. The most important knowledge the students benefited from was learning and being able to view tell-tell signs of infections and bacteria due to food poisonings. However, the

students benefited from numerous aspects of meat in all of the lectures, from muscle to meat, proper handling and harvesting animals, and proper storage and food preparation. Many of the students think twice before ordering wings at any wing restaurant due to the price and from the restaurants food reputation.

The rewards that I have earned have mostly come from assisting students my age. I first thought I would be looked down upon, however, if I made a mistake, the students did not laugh or make jokes about it. They encouraged me to keep moving. I could ask

for their honest opinion about laboratory activities or even presentation activities. The main reward was when finishing presenting my lecture; I was told that I needed to continue with my first dream of becoming an agricultural education teacher. What had stopped me from my dream was the simple problem of not having the funds to pay for the [PRAXIS] tests. In my final thoughts, people are there to help you if you have any troubles whether it's through a word of encouragement or a helping hand. Your peers are usually on your side. They know what you are trying to accomplish and they are cheering for you all the way.

The Agricultural and Extension Education faculty and staff wish you and your family a healthy, happy and prosperous new year.

Research in Action: Agricultural Awareness and Perceptions of Freshmen at West Virginia University

by Pfeifer, L. L., & Boone, H. N.

Increased dependence on technology and further removal from agricultural practices has given rise to a decrease in agricultural literacy among members of society, which has established a need for advancement in educating individuals about the basic concepts of agriculture. This study was designed to determine the knowledge of agriculture possessed by incoming freshmen at West Virginia University. The data collected for this study were obtained from 403 freshmen participants who reported their responses to 35 Agricultural Knowledge, and 35 Agricultural Perceptions statements and questions on an instrument administered during multiple First Year Orientation courses.

Findings

Demographic Characteristics

There were 216 (53.6%) females and 186 (46.2%) male respondents included in the study. A majority of the respondents ($N = 346$, 85.9%) of the respondents indicated their age using the 18-21 years category. Three hundred eighty-two (94.8%) respondents were traditional college students. Two hundred ninety-eight (73.9%) respondents listed their college rank as "First Semester Freshman" and 64 (15.9%) respondents listed "Freshman" as their college rank. All respondents in the study were asked to identify their college major. All majors were then classified within their respective colleges within West Virginia University. One hundred fourteen (28.3%) respondents identified majors within the College of Agriculture.

All respondents in the study were asked to identify the geographic location of their homes and if they had ever worked on a farm, ranch, or in an agricultural business. Forty-one respondents (10.2%) identified "farm or ranch" as their home geographical location. One hundred fifteen (28.5%) respondents had worked on a farm or ranch and 46 (11.4%) respondents had worked in agribusiness.

The 403 student respondents were divided into two groups for the analysis: Davis College Respondents ($n = 114$) and Non-Davis College Respondents ($n = 284$) for the first analysis. Individuals who indicated they were enrolled in a major within

the Davis College were categorized as Davis College respondents, while all other respondents who indicated their major as being in another college were grouped as Non-Davis College respondents. For the second analysis the 403 student respondents were divided into agricultural background respondents ($n = 129$) and non-agricultural background respondents ($n = 274$) for the second analysis. Individuals who indicated that they "grew up on a farm or ranch," had "ever worked on a farm or ranch," and/or had "ever worked in an agricultural business" were categorized as agricultural background respondents while all other respondents were grouped as non-agricultural background respondents.

General Agricultural Knowledge Comparisons by Groups

A composite score for the General Agricultural Knowledge category was calculated by adding the responses to the 13 statements in this category (1 = correct answer 0 = incorrect answer). The *t*-test statistical procedures were used to determine if statistical differences existed in the means of each of the comparison groups for General Agricultural Knowledge (GAK).

The maximum score possible for the 13 General Agricultural Knowledge statements was 13. A mean score of 9.08 ($SD = 2.25$) was calculated for all 403 respondents. The mean score of Davis College respondents was 9.90 ($SD = 2.30$). The mean score of Non-Davis College Respondents was 8.75 ($SD = 2.17$). The mean overall score of agricultural background respondents was 9.58 ($SD = 2.22$). The mean overall score of non-agricultural background respondents was 8.84 ($SD = 2.24$).

Independent *t*-test statistical analysis procedures were used to compare the means of each of the two groups, Davis College and Non-Davis College respondents, and agricultural and non-agricultural background respondents for General Agricultural Knowledge. The statistical analysis results (Davis/Non-Davis College: $t = 4.711$, $df = 396$; agricultural/non-agricultural background: $t = 3.116$, $df = 401$) were significant at $\alpha \leq 0.05$. Davis College majors scored higher on the General Agricultural Knowledge statements than their Non-Davis College counterparts. Students with an agricultural background scored higher on the

General Agricultural Knowledge statements than students without an agricultural background.

Agricultural Career Literacy Comparisons by Groups

A composite score for the Agricultural Career Literacy category was calculated by adding the responses to the five statements in this category (1 = correct answer, 0 = incorrect answer). The *t*-test statistical procedures were used to determine if statistical differences existed in the means of each of the comparison groups for Agricultural Career Literacy (ACL).

The maximum score possible for the true and false questions pertaining to the Agricultural Career Literacy statements was five and a mean score of 3.04 ($SD = 1.16$) was found for all 403 respondents. The mean overall score of Davis College respondents was 3.38 with a standard deviation of 1.21. The mean overall score of Non-Davis College respondents was 2.91 with a standard deviation of 1.11. The mean overall score of agricultural background respondents was 3.33 with a standard deviation of 1.12. The mean overall score of non-agricultural background respondents was 2.91 with a standard deviation of 1.16.

Independent *t*-test statistical analysis procedures were used to compare the means of each of Davis College and Non-Davis College respondents and agricultural and non-agricultural background respondents for Agricultural Career Literacy. The statistical analysis results (Davis/Non-Davis College: $t = 3.536$, $df = 193$; Agricultural/Non-Agricultural Background: $t = 3.501$, $df = 401$) were significant at $\alpha \leq 0.05$. Davis College majors scored higher on the Agricultural Career Literacy statements than their Non-Davis College counterparts. Students with an agricultural background scored higher on the Agricultural Career Literacy statements than students without an agricultural background.

Agricultural Policy Literacy Comparisons by Groups

A composite score for the Agricultural Policy Literacy category was calculated by adding the responses to the ten statements in this category (1 = correct answer, 0 = incorrect answer). The *t*-test statistical pro-

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Research in Action: Agricultural Awareness and Perceptions (Continued)

cedures were used to determine if statistical differences existed in the means of each of the comparison groups for Agricultural Policy Literacy (APL).

The maximum score possible for the true and false questions pertaining to the Agricultural Policy Literacy statements was 10 and a mean score of 7.43 with a standard deviation of 1.97 was found for all 403 respondents. The mean overall score of Davis College Respondents was 8.01 with a standard deviation of 1.85. The mean overall score of Non-Davis College Respondents was 7.19 with a standard deviation of 1.99. The mean overall score of Agricultural Background Respondents was 7.85 with a standard deviation of 1.91. The mean overall score of Non-Agricultural Background Respondents was 7.24 with a standard deviation of 1.97 (see Table 3).

Independent *t*-test statistical analysis procedures were used to compare the means of each of the two groups, Davis College and Non-Davis College respondents, and agricultural and non-agricultural background respondents for Agricultural Policy Literacy. The statistical analysis results (Davis/Non-Davis College: $t = 3.888$, $df = 223$; Agricultural/Non-Agricultural Background: $t = 2.951$, $df = 401$) were significant at $\alpha \leq 0.05$. Davis College majors scored higher on the Agricultural Policy Literacy statements than their Non-Davis College counterparts. Students with an agricultural background scored higher on the Agricultural Policy Literacy statements than students without an agricultural background.

Environmental and Natural Resources Agricultural Literacy Comparison by Groups

A composite score for the Environmental and Natural Resources Agricultural Literacy (ENRAL) category was calculated by adding the responses to the seven statements in this category (1 = correct answer, 0 = incorrect answer). The *t*-test statistical procedures were used to determine if statistical differences existed in the means of each of the comparison groups for Environmental and Natural Resources Agricultural Literacy (ENRAL).

The maximum score possible for the true and false questions pertaining to the Environmental and Natural Resources Agricultural Literacy statements was seven and a mean score of 5.52 with a standard deviation of 1.38 was found for all 403 respon-

dents. The mean overall score of Davis College Respondents was 5.92 with a standard deviation of 1.21. The mean overall score of Non-Davis College Respondents was 5.36 with a standard deviation of 1.43. The mean overall score of Agricultural Background Respondents was 5.81 with a standard deviation of 1.20. The mean overall score of Non-Agricultural Background Respondents was 5.39 with a standard deviation of 1.44 (see Table 4).

Independent *t*-test statistical analysis procedures were used to compare the means of each of the two groups, Davis College and Non-Davis College Respondents, and Agricultural and Non-Agricultural Background Respondents for Environmental and Natural Resources Agricultural Literacy. The statistical analysis results (Davis/Non-Davis College: $t = 4.007$, $df = 245$; Agricultural/Non-Agricultural Background: $t = 3.037$, $df = 297$) were significant at $\alpha \leq 0.05$. Davis College majors scored higher on the Environmental and Natural Resources Agricultural Literacy statements than their Non-Davis College counterparts. Students with an agricultural background scored higher on the Environmental and Natural Resources Agricultural Literacy statements than students without an agricultural background.

Agricultural Literacy Perception Scores

A composite score for the Agricultural Literacy Perceptions (ALP) category was calculated by averaging the responses to the 35 statements in this category. The *t*-test statistical procedures were used to determine if statistical differences existed in the means of each of the comparison groups for Agricultural Literacy Perceptions (ALP).

The Agricultural Literacy Perceptions portion of the instrument consisted of 35 statements. Respondents were directed to rate their responses to the statements using a Likert scale ranging from Strongly Agree (1) to Agree (2) to Neutral (3) to Disagree (4) to Strongly Disagree (5). A mean score of 2.67 with a standard deviation of 0.28 was found for all 403 respondents. The mean score of Davis College Respondents was 2.55 with a standard deviation of 0.29. The mean overall score of Non-Davis College Respondents was 2.71 with a standard deviation of 0.26. The mean overall score of Agricultural Background Respondents was 2.58 with a standard deviation of 0.32. The mean overall score of Non-Agricultural Background Respondents was 2.71 with a standard deviation of 0.26 (see Table 5).

Independent *t*-test statistical analysis procedures were used to compare the means of each of the two groups, Davis College and Non-Davis College Respondents, and Agricultural and Non-Agricultural Background Respondents for Agricultural Literacy Perceptions. The statistical analysis results (Davis/Non-Davis College: $t = -5.569$, $df = 396$; Agricultural/Non-Agricultural Background: $t = -4.046$, $df = 200$) were significant at $\alpha \leq 0.05$. Davis College majors scored higher on the Agricultural Literacy Perceptions statements than their Non-Davis College counterparts. Students with an agricultural background scored higher on the Agricultural Literacy Perceptions statements than students without an agricultural background.

Conclusions

Freshmen students at West Virginia University possess limited knowledge and understanding of the agricultural industry as a whole. The findings presented as a result of these researchers efforts are not vastly different than those identified by various other researchers striving to alter the deficit of agricultural illiteracy in today's society.

Students with a background in agriculture had higher levels of knowledge and perceptions of agriculture. The overall agricultural knowledge scores of rural high school students in Frick's study was 22.77 out of 35 and 16.95 out of 35 for inner-city high school students. This researcher's results for agricultural background students found a mean score of 25.73 out of 35 and 23.64 out of 35 for non-agricultural background students. When considering the perceptions scores for these groups, Frick's rural high school student population scored a mean of 83.90 out of 175, or 2.40 out of five and his inner-city high school population scored a mean of 85.79 out of 175, or 2.45 out of five.

Freshmen respondents who are enrolled in a major within the Davis College exhibit increased levels of agricultural knowledge and perceptions.

Laura Pfeifer earned a Master of Science (2008) degrees in agricultural education from West Virginia University. Dr. Harry Boone was Laura's graduate advisor. The complete thesis can be accessed at <https://eidr.wvu.edu/etd/documentdata.eTD?documentid=5664>.

Important Dates

Jan 23-25	Winter Leadership Conference	Cedar Lakes
Feb 5-7	National Ag Ed Inservice	Indianapolis
Feb 21-28	National FFA Week	
Mar 8-9	State Ham, Bacon and Egg Show and Sale	Charleston
Apr 3	Governing Body Meeting	
Apr 10	Beef Expo and WV Grasslands Contest	
Apr 23-24	WV Envirothon	
Apr 25	FFA and 4-H Equine Judging Contest	Keyser
Jul 8-11	WV State FFA Convention	Cedar Lakes
Jul 29-31	Technical and Adult Education Conference	
Aug 16	4-H & FFA Dairy Cattle CDE	Jackson's Mill

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